RUBÉN VILLAHERMOSA CHAVES

Wyckoff 2.0

Structures, Volume Profile and Order Flow

COMBINING THE LOGIC OF THE WYCKOFF METHODOLOGY AND THE OBJECTIVITY OF THE VOLUME PROFILE

Wyckoff 2.0: Structures, Volume Profile and Order Flow

Combining the logic of the Wyckoff Methodology and the objectivity of the Volume Profile

Rubén Villahermosa Chaves

CONTENT

PREFACE

With the publication of this new content we give continuity to the first book "The Wyckoff Methodology in Depth", where all the analytical tools that this methodology addresses are presented in a clear way, as well as the more theoretical aspect in the study of the behavior of financial markets.

In this book we will go a step further and address more complex concepts; we will review the doubts most commonly raised by students of the methodology and incorporate new tools based on the information provided by the volume data that will be very useful, such as the Volume Profile and Order Flow.

I strongly recommend that before starting the study of this book you have previously internalized all the concepts covered in the first one, since everything seen is taken as understood and, if not, it could cause some confusion or lack of understanding.

PART 1. ADVANCED CONCEPTS OF THE WYCKOFF METHODOLOGY

As with the previous book, it is not intended at any point to divulge the Wyckoff methodology approach from its purest point of view. There may be Wyckoff traders who do but we understand that today's markets have changed substantially from those studied by Richard Wyckoff and it is our task to know how to adapt to these changes.

But if there is one thing that is unchanging and where the advantage of this approach over others really lies, it is the principles underlying its teachings. Regardless of how markets and their traders have changed, everything is still governed by the universal law of supply and demand; and this is the cornerstone of the methodology.5

This new way of analyzing the markets that I propose has caused me some discussion with well-known (purist) disseminators of the method. As I say, my objective is not to teach the most primitive form of

the methodology, but to take the principles that I consider valid and enhance it together with the most modern tools of volume analysis.

Actually, I believe that disseminating Richard Wyckoff's teachings as he shared them is practically impossible. In the end, everyone teaches their own view of the methodology along with the tools they trust the most; and this is not to say that any one is above the rest. The important thing is to obtain profitability from the market regardless of the approach used.

Having said this, I am sure that if Richard Wyckoff were alive today, he himself would have taken care to evolve his own teachings to adapt to new markets. As he was at the time, he would have remained a student of volume and this would have led him to delve deeper into tools such as the Volume Profile and Order Flow.

And this is exactly what we have done and what I will introduce you to throughout the book; bringing together the most solid principles of market analysis with the most advanced tools of volume analysis.

But before we get to that point we are going to add some advanced concepts that you should know and clarify a number of frequently asked questions.

1.1 THE LABELS

All the theoretical section seen in the first book is necessary and indispensable content to master this approach and truly understand how the market moves, but the Wyckoff methodology, or my way of understanding it, goes much further.

It is not simply a matter of labeling a chart almost robotically and that's it. We have learned what underlies each event; how it is formed, how it is represented on the chart, the psychology behind it and so on. But as I say, the method is much richer.

I say this because, by the very nature of the market, it is practically impossible for any two structures to be completely the same. While it is true that on a daily basis we see "textbook" schemes, which are very genuinely adapted to classic examples, on most occasions the market will develop less conventional structures, where the identification of such events will be more complex.

It is therefore essential not to focus on the exact search for events (mainly the stop events that make up Phase A) and to keep in mind that what is really important is the action as a whole. In other words, in many charts we will see that a trend movement stops and starts a lateralization

process, but we are not able to correctly identify those first 4 stopping events. In view of this, we may discard the asset and miss a future trading opportunity. This is a mistake. As I say, the important thing is not that we know how to identify those 4 stop events, but that the market has objectively produced the stop of the trend movement. You may not identify the Climax, the Reaction and the Test in a genuine way, but the objective is that the market has stopped and has initiated a change of character (migration from trend to sideways).
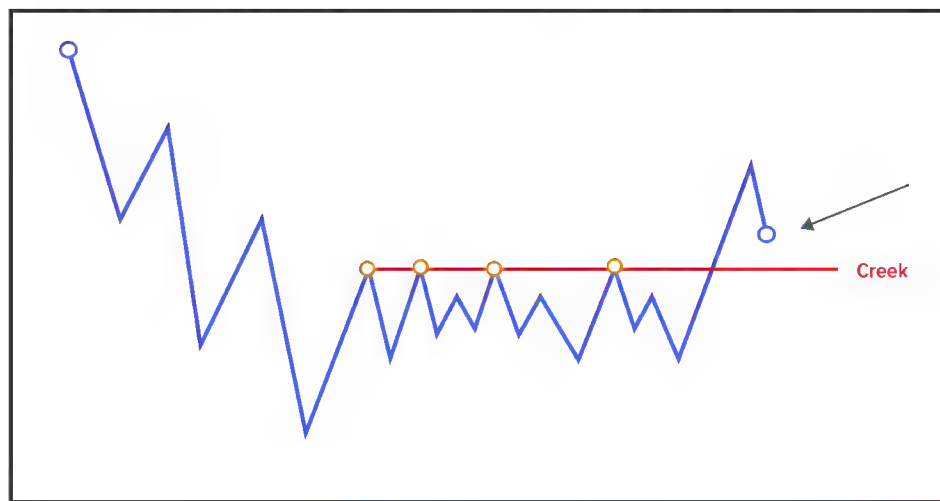
As we can see in the examples, although these structures do not look anything like the classic structures already studied, if we open the graph and we find ourselves at the point marked with the arrow, it is not unreasonable to think that possibly a process of accumulation has developed below. It will be more or less difficult to identify the events of the methodology, but what is objective is that we see a level where the price is that we see a level where the price has rejected on several occasions (Creek) and has finally managed to break it and position itself above. This is the key.
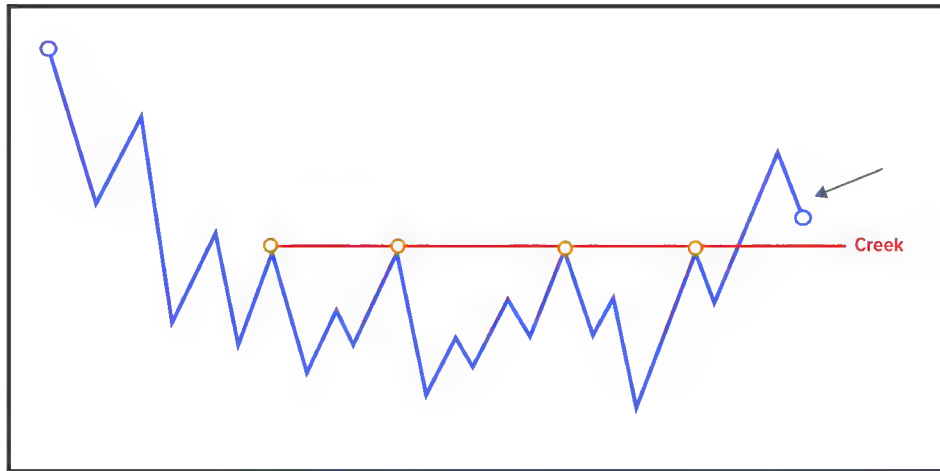
Surely if we force ourselves we can label each and every movement but I repeat that this is not the important thing. The important thing about the methodology is the logic behind it: that for the price to go up there must first be an accumulation; and for it to go down there must be a distribution. The form or manner in which they develop these processes should not be the determining factor.

The level of open-mindedness required is very great. Maybe even some people's heads have exploded, but this is the reality. Fortunately, we often see classic structures, but the continuous interplay between supply and demand means that these processes can develop in infinite ways, and we have to be prepared to see them all the same.
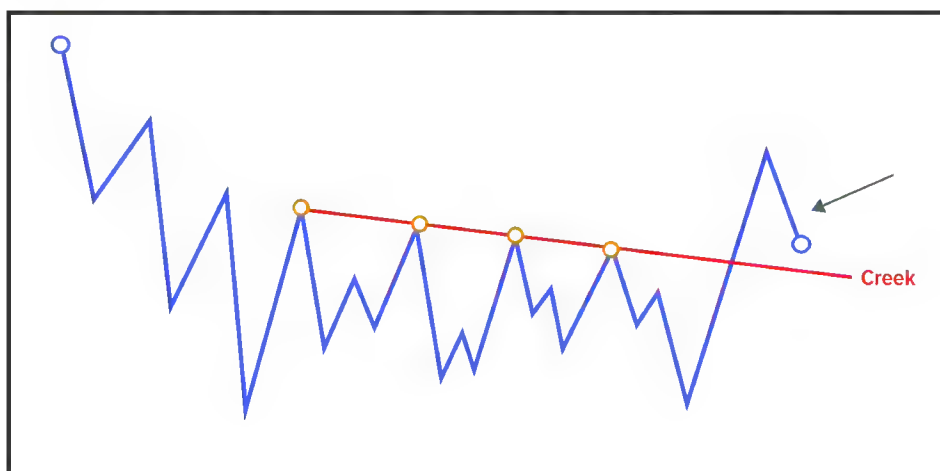
Rather than thinking about labeling each and every price movement, we are going to focus on trying to identify according to the traces we observe who is probably gaining market control based on the theory studied.

1.2 PRICE VS. VOLUME

In our way of conceiving market analysis, we initially do not value the possibility of not taking into account either of these two data points, price and volume. But as you delve deeper into the ecosystem that surrounds the financial world, some obstacles start to arise.

Without beating around the bush, I have to say that in my view price data is certainly more relevant than volume data. And I will now reason this assertion on the basis of two elements.

On the one hand, the intraday volume that we can analyze in any asset can be very misleading depending on the time of the session. For example, at the opening of the American session of the S&P500 in its local time (ETH), we will always see a large volume, much higher than that seen prior to that opening during the regular time (RTH). And of course, all the previous analysis will be biased in a certain way.

As we can see in the chart of the ES (SP500 future), the highest volatility and therefore price movement occurs during the American session, with a very clear lack of participation during regular trading hours. It would not make much sense to make analysis taking into account globally all price action and volume as it could lead to confusion.

It is not that during regular trading hours we have identified a movement with a lack of interest (low volume); it is that this low volume is due to an absence of traders at that time. The same would be true for other times during the session, such as at the mid-day stop or just before the start of the final stretch of the day, when there is also a significant increase in volume.

Once we know this, we have two ways to deal with this situation:

❖ If we want to continue trading on intraday time frames we must necessarily analyze the price and volume in comparative terms; on the one hand the one observed during local hours and on the other hand the one seen during regular hours.

❖ Furthermore, the best way to avoid confusion is to analyze the daily chart. As this temporality covers both sessions

(ETH and RTH), there is no need to distinguish them for analysis. But of course, this would already require a total change of trading style.

If there is one piece of data that already incorporates all the information, it is the price. The price is the graphical representation of all the orders already executed. We could be analyzing an asset at any time and the price action would be faithfully reflected without having to be aware of the time of the session and perform comparative analysis. This is the advantage of price.

Although without volume we lose a large part of the available information, the continuous interaction between supply and demand leaves its traces in the price and it develops some certainly repetitive patterns (not in form but in substance).

Obviously I am not recommending trading without analyzing volume data, it is not necessary; I simply wanted to highlight the prevalence of price over volume for our way of understanding and trading the markets.

Later on we will also see another drawback of volume data due to the Over the Counter (OTC) and Dark Pools markets.

1.3 TYPES OF ADVANCED CHARTS

In recent times, other forms of representing market activity have also appeared. Among these types of charts are tick, volume and range charts.

The main advantage of these charts is that they reduce the noise present in time charts. These three types of charts have the common peculiarity that they eliminate the time variable, which can be very useful precisely for conditions such as those described above, where the market spans different activity environments.

1.3.1 TICKS CHARTS

A tick represents a transaction, a negotiation between two parties. Therefore, the tick chart will be updated (the current candlestick will be closed and a new one will be opened) when a certain number of transactions (ticks) have taken place.

The configuration of the chart (the number of ticks) will vary from market to market as volatility differs from one market to another. This is why you will have to make different tests until you find the most suitable one.

Generally the volume will be very similar in all the candlesticks generated, but there will be subtle differences that can give us interesting information since this type of chart measures the activity in terms of transactions, but does not take into account the volume or amount traded in those transactions.

That is, a chart set at 1000 ticks will generate a new candlestick when those 1000 ticks occur, but the amount traded in those 1000 transactions will differ. It is possible that 1 contract or several contracts are traded in one transaction.

1.3.2 VOLUME CHARTS

The difference between tick and volume charts has to do with the amount traded. While the tick chart measures the number of transactions without taking into account how many contracts, shares or units have been traded in each transaction, the volume charts measure the number of contracts, shares or units traded before the generation of a new candlestick.

For example, a chart set to 1000 volume will generate a new candlestick when that amount is traded, regardless of the number of trades that were necessary for its completion.

The main negative aspect of using this type of chart is that it disables the use of volume analysis techniques.

1.3.3 RANGE CHARTS

While the two types previously presented based their representation on volume data, the *range* chart is based on price data.

This type of chart represents market activity from the point of view of price movement. All its bars will be displayed with the same size, regardless of the time it took for their formation. In high volatility environments more bars will appear and vice versa for low volatility environments.

In case the chart is set to range 15, new bars will appear when the price moves 15 ticks in one direction or another

1.4 ACCUMULATION OR FAILED DISTRIBUTION

When the analysis of all the traces observed on the chart suggests that the imbalance is occurring towards one side but at the moment of truth the opposite side presses more aggressively, we will be talking about continuity failure or failed structure.

During the development of the structures, the control of the market is at stake and the market may be changing sides (in favor of buyers or sellers) continuously, depending on the types of traders and the valuations they make of the asset.

As we know that until we visualize the effect of a cause we cannot determine what it is (accumulation or distribution), it would almost be more logical to avoid using the term failed structure, since a failed accumulation will always be a distribution structure and vice versa. But it is a very interesting concept that helps us to understand an important market dynamic, which is none other than the knowledge of the different types of traders and how they intervene based on temporality
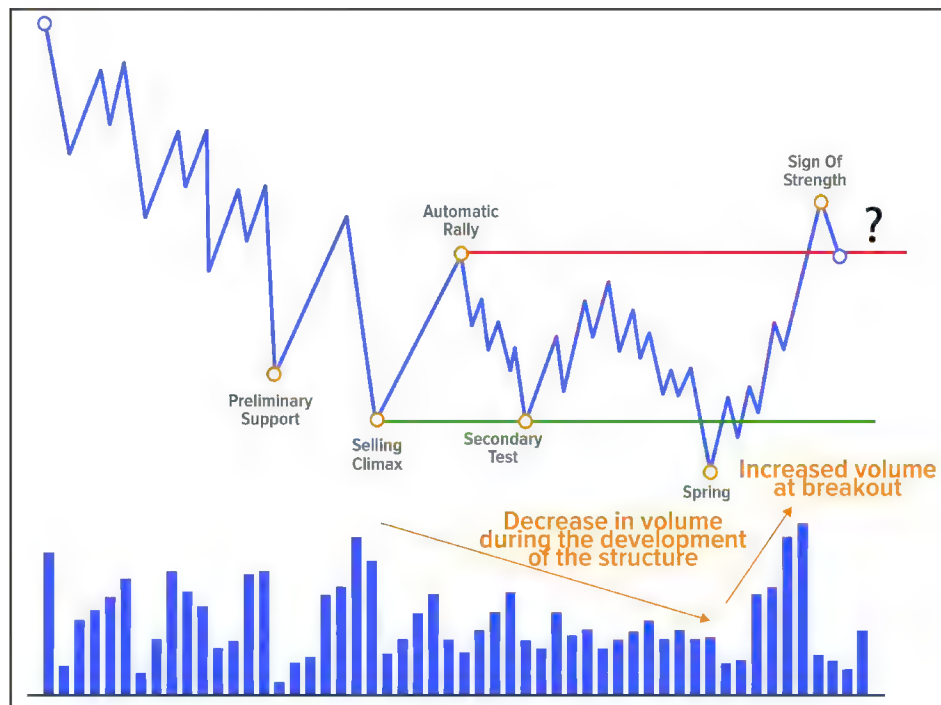
When the price makes a potential Spring at the lows of the structure and from there manages to reach the top of the structure again, it is obvious that buyers have entered with some aggressiveness down there; but we do not know when they will decide to close their positions. It may simply be that they are very short-term traders who take advantage of the visit to some liquidity zone (either at the highs of the structure or at some intermediate zone) to find the counterpart with which to match their orders and to close their positions there obtaining profit. This closing of buying positions would cause a loss of bullish momentum and possibly a new downward turn.

Or it may be that traders who have bought at the Spring have a longer-term perspective and will do everything possible to stay in the market and defend their position if necessary, producing the full development of the accumulation.

In addition, we also do not know if there may be longer-term

traders, with a greater ability to move the markets pending this upward movement to take advantage of it and enter aggressively short.

On the other hand, it should also be remembered that not all large traders win systematically and recurrently over time. Sometimes many of them are forced to take losses and this failed structure context could be a perfect example. As Al Brooks rightly says in his books on Price Action, in liquid markets every slightest price movement is generated because one big trader is buying and another is selling. It is a battle between these large capitals and therefore there will be part of them that will generate a loss in some of their trading.

The key to determine that we are in front of a failed structure is that it has absolutely all the traces in favor of one direction but at the decisive moment (in the test after the break); it fails and generates an imbalance in favor of the opposite side.

As for the example of failed accumulation, we would have to see that all the traces suggest that the market is controlled by the buyers, that the price has to develop a Spring potential, that the bullish breakout is genuine from the point of view of price action and volume; but that finally in the BUEC potential position the price fails to continue rising, and an imbalance in favor of the sellers is provoked, leaving the structure as distributive.
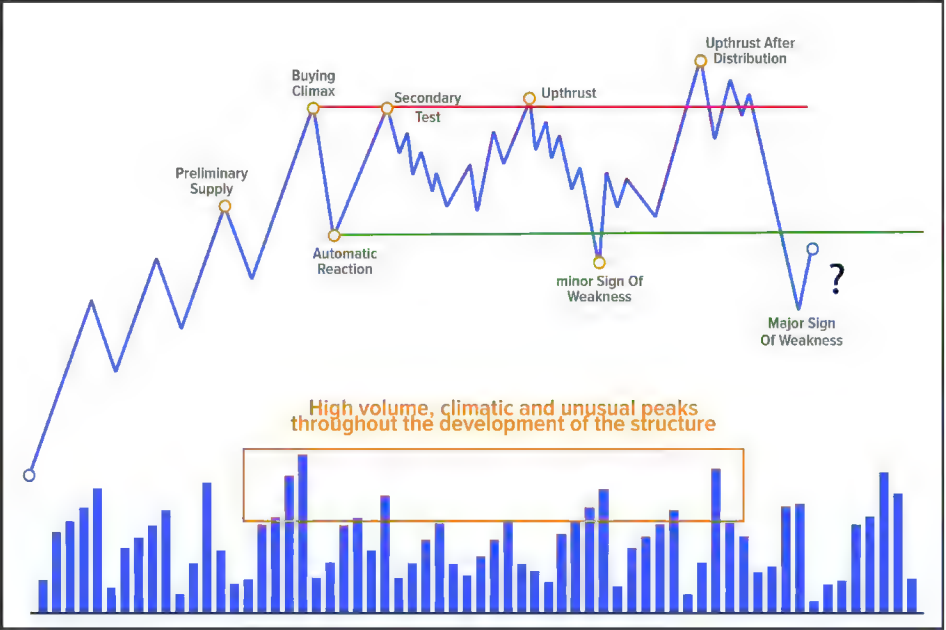
Exactly the same but in reverse we would need to see to determine a failed distribution: traces in favor of sellers, development of potential Upthrust, genuine bearish breakout and that in test position after breakout aggressive buying enters and rotates the structure as accumulation.

It is important to be aware that we do not know the ability of traders to continue to control the market because at any time a trader with a greater capacity can appear and cause the rotation. What at the beginning seemed to be unbalanced to one side, finally with this new appearance, the imbalance is confirmed to the opposite side.

So we have these two very important casuistries to evaluate:

❖ **We do not know the intention of the traders who are supporting the current movement**. If they are short term traders who will close positions in the next liquidity zone or if on the contrary they have a longer term perspective and will continue until the complete development of the structure.

❖ **We do not know if traders with a higher capacity can step in**. At the moment of truth, in the test after the breakout that would confirm the directionality of the structure, aggressive traders with a greater ability to move the market by pushing in the opposite direction may appear, since in the longer term they may have a different vision.

Obviously we encounter this difficulty continuously, that is why our advantage is to operate in favor of the last imbalance and for this it is vital to identify the dominant event: the shock.

The shakeout, as already discussed, is the most determining action

in market functioning. Its underlying logic is so powerful that it leads us to always bias in favor of it. Then, if the rest of the traces go along with it, we will always favor trading in the direction of the last shock, i.e. long after seeing a potential Spring; and short after seeing an Upthrust.
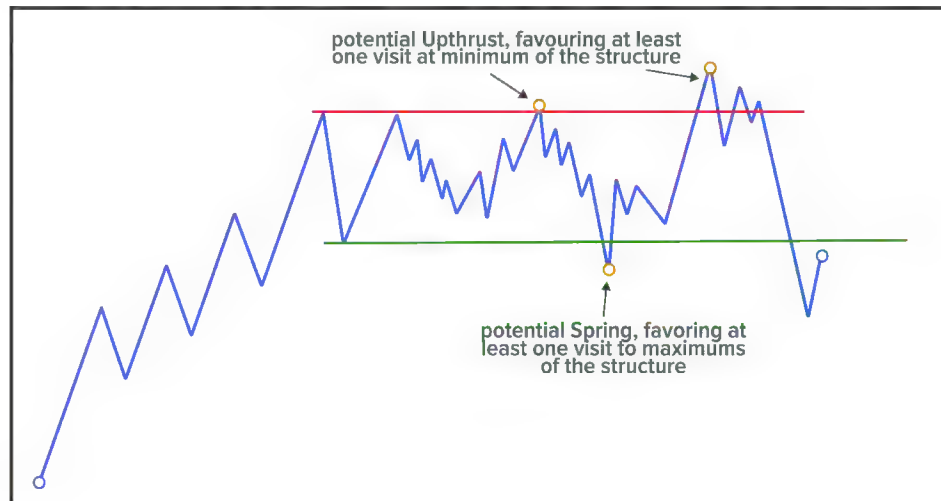
Some may conclude that waiting for price at extremes and trading only potential Upthrust/Spring situations is the most convenient way to simplify the whole analysis; and it's not entirely out of line. That's the beauty of the Wyckoff methodology, that by offering a way to understand as objectively as possible how the market moves, each trader can use its principles to develop their own strategies.

From my point of view, the traces offered by the development of the structures from their inception are significant and help us to establish scenarios with a higher probability. For example, if I observe certain distributional characteristics in a structure and it is subsequently in a position of potential bearish breakout and potential Spring, the analysis of the context will lead me to favor the bearish breakout; while the trader who only trades the shocks at the extremes without evaluating anything else will do the opposite. And generally the market will develop (in this example) in favor of the distributive continuation since the imbalance is

latent and has been evident during the development of the range.

1.5 STRUCTURAL FAILURE

It is a very simple concept that can help us to evaluate the dynamics of the movements.

This failure can be found in all types of structures; in structures with bullish or bearish slopes as well as in horizontal, convergent or divergent structures.

The first thing to do is to identify the structural logic that the price decides to follow. This will be determined by the successful touches that respect a structure formed by two zones of supply and demand. This is the initial key: identify the structure that the price has validated. The more touches it has, the more confidence that structure will give us.

At that point, and under the principle of favoring the continuity of what the price has been doing, it would be logical to think that the market will continue to move respecting that structural logic, moving from extreme to extreme.

In the event that the price fails to develop a new test on the opposite side and instead generates a turn before reaching that zone, we will say that it has developed a structural failure since it has not continued with the dynamics that it was bringing and this signal adds strength to the scenario

in favor of that last turn.
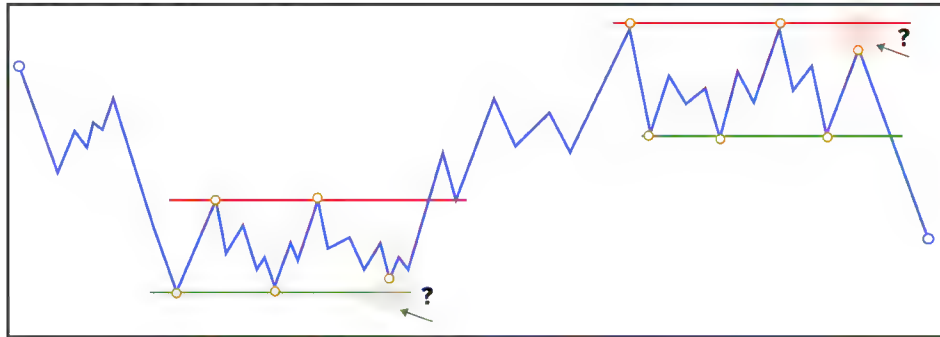
From this concept, it is understood that the event of the last support of supply or demand (Last Point of Support and Last Point of Supply) are structural failures in which the price is blocked in its attempt to go after the shakeout event to start from that point the subsequent movement to break the structure.

1.5.1 WEAKNESS

The example of structural failure that denotes weakness is found when the price, after validating a structure on several occasions, is unable to continue moving under that logic of movements and cannot reach the top of the structure.

This inability to continue moving as it had been doing up to that point denotes underlying weakness. Buyers are no longer in control of the market and it is the sellers who have begun to appear more significantly.
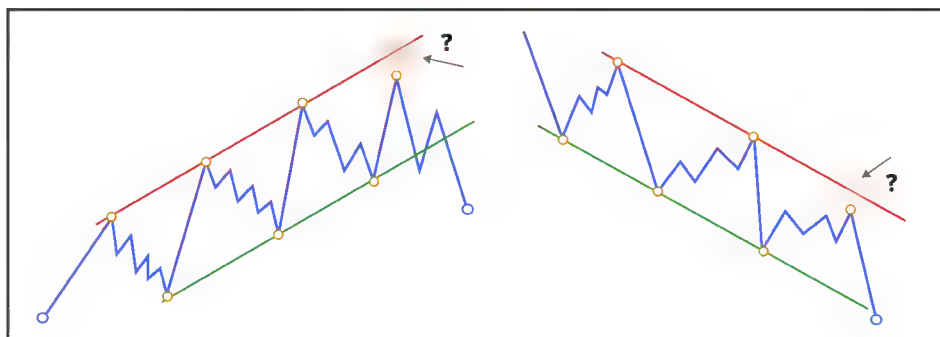
This indication does not suggest an immediate reversal to the downside; rather, it is one more element to take into account when correctly reading the market context.

It could simply be a temporary halt of the previous trend to develop from there a period of consolidation during which to reaccumulate stock and continue rising.

1.5.2 STRENGTH

The action that would denote bottom strength would be obtained when we see that the price cannot reach the bottom of the structure it has been working on.

That is, if the price has been developing a series of lower highs and lower lows whose action fits perfectly within the upper and lower limits, we will favor that the market continues to behave in the same way and therefore we will look for a new test on the opposite side of the structure. If, for example, it comes from a test on the high side of the structure, the dynamics suggest that it should now test again on the low side. If during the development of such a move the price turns around without reaching

the bottom, we will say that the market has generated a structural failure and it is a sign of market strength as buyers have not allowed the price to fall further down.
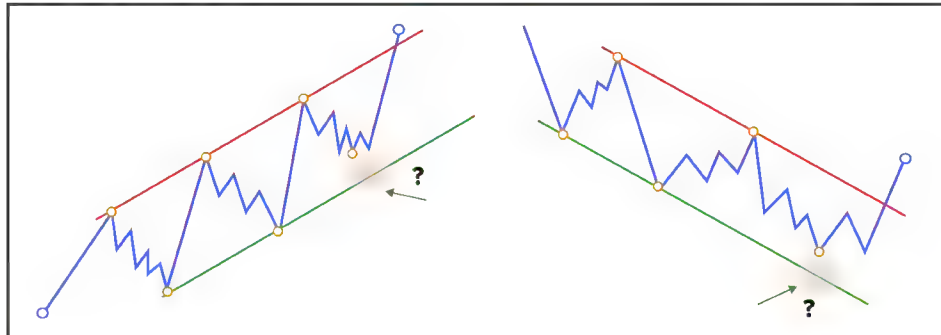
If in addition to this footprint such a move manages to shake out some relevant previous low we would be in a potential Spring situation with greater underlying strength because it conflates with that structural failure.

The reasoning behind such action is that buyers have entered aggressively unbalancing control in their favor. These buyers have a higher interest rate and are blocking the price from falling. They don't want the price to go down. They don't want anyone else to be able to ride the upward move.

This indication does not suggest an immediate reversal to the upside; rather it is one more element to take into account when reading the market context correctly.

1.6 SHORTENING OF THE THRUST (SOT)

It could be translated into English as "Shortening of the Thrust". It is a pattern of change of direction. It is an analytical tool originally used by Wyckoff to measure the loss of momentum or exhaustion of an impulsive motion or thrust.

Visually it is observed how each new extreme travels a shorter distance than the previous extreme and therefore it is said that the thrust is shortening.

- ❖ For the uptrend example, we would observe how each new high travels a shorter distance than the previous high; suggesting some deterioration in demand and signaling a possible bearish turn.

- ❖ For the downtrend example, we would observe a decrease in the distance the new low travels relative to the distance the previous low traveled, suggesting some deterioration in supply and signaling a possible upward turn.

The main idea is a lack of continuity in that direction; an exhaustion of the forces that so far seemed to be in control of the market. The loss of momentum anticipates a major pullback and sometimes even a reversal of the trend.
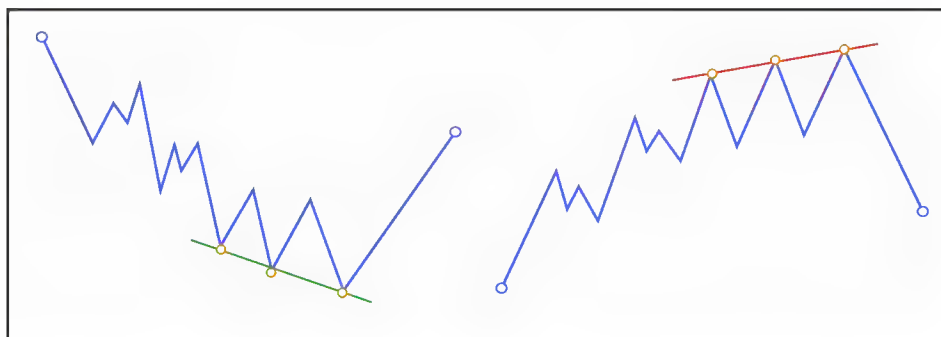
For this behavior to be valid, a minimum of three thrusts in the direction of the trend is required. From three or four momentum moves, it is useful to start looking for this shortening pattern in the final push.

❖ When the price advance shortens but there is strong volume, it means that the big effort got little reward: Effort/Result Divergence. In the case of a bearish example, demand would be appearing; and in a bullish example, supply would be appearing.

❖ When the price advance shortens and there is also weak volume, it means exhaustion. In the case of a bearish example, supply would be withdrawing; and in a bullish example, it would be buyers withdrawing from the market.

When there are more than four pushes and shorting persists, the trend may be too strong to trade against.

What would confirm the change in direction would be a strong impulsive move in the opposite direction. After the shortening of the thrust, we want to see the new impulse in the opposite direction have high volume, denoting intentionality. After this impulse that changes direction direction we could wait for a pullback to seek to join in the direction of the new impulsive movement.

Always keep in mind the context in which the shortening of the

thrust takes place:
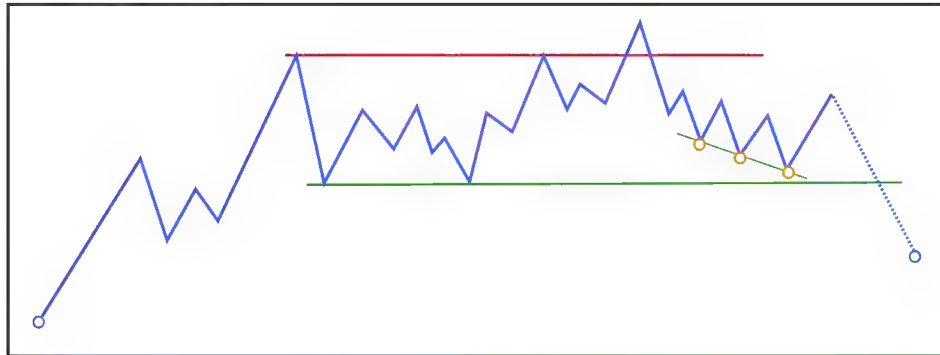
If the price breaks the top of a range and reverses, this action is a potential Upthrust. If after a few bearish waves a shortening of the thrust occurs and suggests a buy trade; you should keep in mind that the price has just developed an Upthrust and will most likely continue to fall. Any buy trade should be avoided, and if taken, closed quickly after a weak response. The same thing would happen in case of observing the bearish pattern after a potential Spring, the directional bias would be marked by the shakeout so the SOT short trade idea would have to be questioned.

The Shortening of the Thrust pattern can also be seen in individual bars as well as in moves. In this case, one would observe how successive bars make less and less progress. If it also coincides in an operating zone where we would be in a position to look for a counter trade for context, the situation would be ideal.
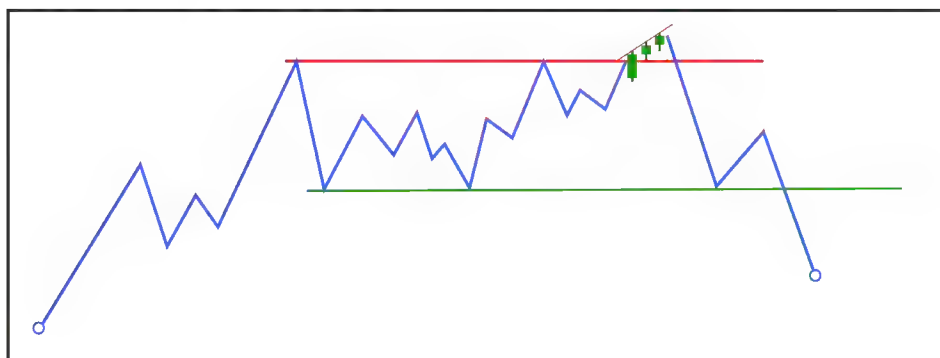
1.7 OTHER TYPES OF STRUCTURES

Initially, structures with horizontal development have been presented as a basic schematic. They are the easiest to identify and for the operator who begins to deepen for the first time in the Wyckoff methodology I would recommend to work this type of schemes almost exclusively.

As we have already mentioned on several occasions, the market is a living entity that is constantly changing due to the continuous interaction between supply and demand. This interaction is what causes the generation of structures, which can be developed in different ways.

It would make no sense to approach the market thinking that it must behave as established by the basic schemes initially studied. The reality is that every moment is unique and will be different from any future one, since it is practically impossible for the same circumstances to occur at two different moments.

For two structures to develop in the same way, the same participants should be present at both moments and behave in exactly the same way, which is impossible.

This is why it is important to be open-minded and try to go a step further in understanding the methodology. Wyckoff gave us some

guidelines to follow highlighting above all: how markets move; the processes of accumulation and distribution; and the three fundamental laws.

This is the theoretical framework that underpins the methodology. The Wyckoff trader relies on these tools to analyze the chart in order to try to elucidate who is in control of the market and thus be able to come up with judicious scenarios.

The next step is to be able to identify the development of a structure even if it does not look ideal. On many occasions we will be able to work in real time with structures that are very genuinely adapted to the classic structures studied, but there will be other occasions when this will not be the case.

And this should not be a cause for disappointment. Advanced Wyckoff traders understand that these accumulation and distribution processes can play out differently depending on how balanced or unbalanced the market is in favor of buyers and sellers.

This is the key to everything. Based on the condition of the market at that moment (who has the most control), the price will develop one type of structure or another.

We will now look at some types of unconventional structures.

1.7.1 SLOPING STRUCTURES

Although they are certainly more difficult to see, they actually

develop in exactly the same way as horizontal structures. Do a test; take one of the examples and mentally try to rotate the image to fit the structure as if it were horizontal. You will see that the general behavior, events and phases have an identical development to the horizontal ranges. The only element that varies is the market condition, and that is that there will be situations where either buyers or sellers will initially have more control.

Generally speaking, we are going to take the view that a structure with an upward slope suggests some underlying strength, i.e. greater buyer control; and that structures with a downward slope suggest some weakness, i.e. greater seller control.
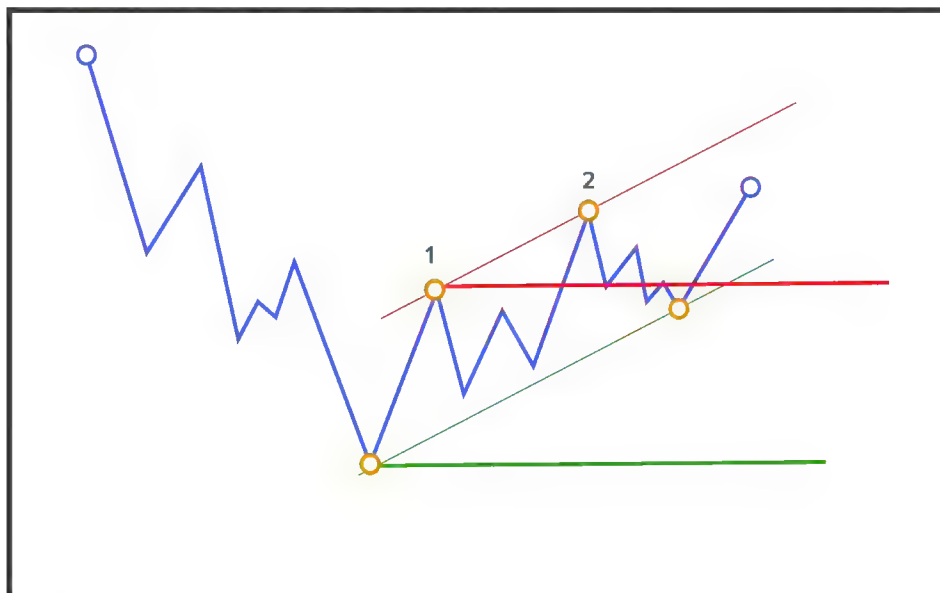
Initially, when identifying the stop Phase A we will establish the limits of the range horizontally. If we observe that in Phase B the price does not respect these extremes and begins to move out of the structure, it will be time to start thinking about a possible sloping structure. We will connect these extremes and observe if the price really respects the limits of the structure.

At other times we will simply open a chart and it will be very visual how the price has respected the extremes of a sloping structure. Connect the lows and highs of Phases A, B and C. You can draw one end first and clone the line at the opposite end. The important thing is that the channel contains virtually all of the price action within it. The more touches these extremes have, the more strength that the structure is being worked (respected).
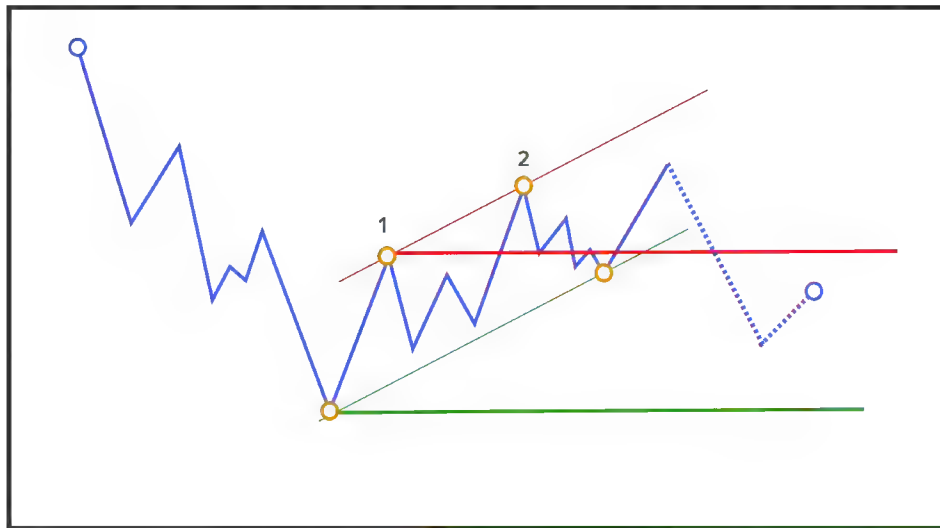
It is important to note that we do not need to see perfect price touches at these extremes to determine that the price is working that structure. It does not need to be something totally precise, the key is that it should be something that jumps out and allows us to connect all the extremes even if it is necessary to draw a zone of a certain width, rather than a line.

Similarly, I would always recommend not to discard horizontal levels altogether. In particular, they offer me greater confidence and there is a chance that the price will re-enter the original structure and we can continue to work it.

There are four possible sloping structures that we can find:

❖ Accumulation structure with an upward slope.

❖ Accumulation structure with bearish slope.

❖ Bearish sloping distribution structure.

❖ Distribution structure with upward slope.

ACCUMULATION STRUCTURE WITH UPWARD SLOPE
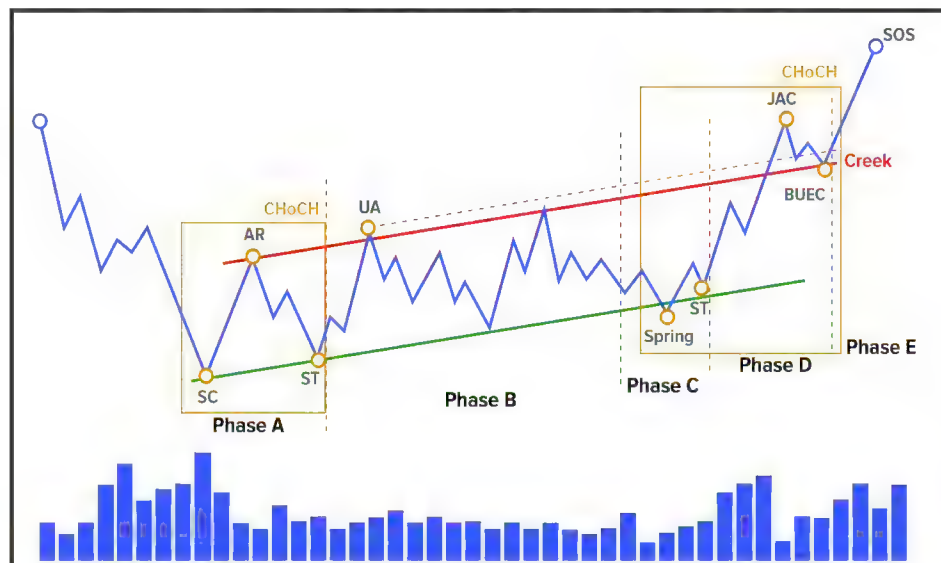
This is the variant that denotes the greatest underlying strength. After the stop Phase A, the price begins to fluctuate up and down during the development of the structure, clearly showing a series of rising highs and rising lows.

Buyers have certain aggressiveness; they value the asset price at higher levels and do not allow it to fall into oversold areas in order to protect their position.

These structures are not easy to operate mainly because the

overcoming of any previous high will seem to us that we are facing a potential shock that will turn the market down. But in reality it is the very nature of the movement: impulses and reversals.

And this impression will be even more present in the BUEC potential zone. Although this is the most conservative entry and gives us greater security, visually we see the price trading at very high levels and it does not seem to us (subjectively) an optimal entry point.

The market, oblivious to all this, will continue its course and if it is really an accumulation process, it will start from there the trend movement out of the range in search of higher levels of liquidity.

This example of the BTC is very instructive as we can identify one of the concepts presented, the structural failure of strength.

We see how after the abrupt fall the price accumulates quickly (green box) to start a new structure a few levels higher. This in itself is a sign of underlying strength. We see that there is a very high volume traded in that fall and the fact of seeing a subsequent reaction to the rise already suggests that at least in principle the sentiment is bullish. If analyzing the context we see that below the current price there are high

volumes we could make a simple interpretation as in such volume have entered aggressively buyers as otherwise the price could not have moved upwards.

Other interesting footprints that suggested accumulation to us is the decrease in volume during the development of the structure and the predominance of the bullish waves of the Weis indicator.

In addition to this, the key element that marks a before and after in the reading of the control in this structure is the Upthrust action. At the top of the structure it develops a minor distribution scheme. This pattern could very well have acted as a function of UTAD and triggered the bearish breakout. This is the behavior we expect to happen after a shakeout, but what we see is a total inability to fall. After this minor distributive scheme the price fails to even reach the bottom of that upward sloping structure it has been working on, and this is nothing more or less than a structural failure of strength.

Then it develops an internal shakeout that acts as a test event in Phase C causing the final imbalance and continuation to the upside.

Also noteworthy is the location of the High Volume Node and the VPOC of the structure. How the price is unable to cross this high trading zone, suggesting the control of the bulls. We will talk about these Volume Profile zones later.

Here we see another example of a bullish sloping cumulative pattern. In this case the slope is quite steep suggesting that the current market condition is quite strong.

We see the final stop without climatic volume (Selling Exhaustion) and how from then on the price starts a clear succession of rising highs and rising lows. Decreasing volume during the development of Phases A and B suggesting absorption. It finds it difficult to position above the High Volume Node but once it gets it after the shakeout continues to show strength and manages to break to the upside with good bullish candlesticks (SOSbar).

Very interesting as the Back Up develops over the top of the structure (Creek) in confluence with an operating level of volume (weekly VWAP).

ACCUMULATION STRUCTURE WITH BEARISH SLOPE

This is the cumulative variant with the greatest weakness. The bearish slope, that dynamic of declining highs and lows, already denotes a total control of bearish traders. Weakness is latent, but even so, buyers finally appear and provoke the cumulative denouement.

After observing the appearance of the first trend stop events, the weakness will be so high that the market will not be able to withstand the development of a horizontal structure and instead signs of weakness will begin to appear, generating lower and lower lows.

Structurally, the price will respect the bearish dynamics, fluctuating between the upper and lower extremes of the channel. The new lows will travel a decreasing distance, visually observing a very common pattern of trend exhaustion (Shortening of the Thrust).

In addition, quite possibly the market will develop some kind of structural failure where at a certain point in time the price abandons the dynamics that would lead it to visit the bottom of the structure and instead finds support somewhere in between. Possibly it has made a floor and is ready to start the uptrend movement.

What would confirm the SOT pattern and structural failure would be for price to now develop strong upside momentum. Preferably we would want to see this momentum effectively break the bearish structure changing the market dynamics. Now it would be the time to wait for a bearish pullback to look to join in favor of the imbalance caused by the buyers.

In this example we see how the price is respecting the extremes by turning up and down. As we have already said, the identification of this type of structures is subjective so they should be very visual and not forced. The idea is that they contain most of the price action.

A detail to highlight in this chart is how the monthly VWAP acts. This is the darkest dynamic level and as can be seen the price reacts on it every time it interacts. From the first touch on the Secondary Test, the price stays consistently above it, a trace that would suggest some control on the part of the buyers.

As always, the key event is the total Shakeout that causes the development of the effect built on that cause. After said Shakeout the price develops a LPS above the VPOC of the structure, which is followed

by the JAC and the Back Up that again is going to look for a confluence zone (weekly VWAP and Value Area High) to from there continue the development in Phase E out of the range.

These zones and volume operating levels will be discussed in detail below.

Here we observe another clear cumulative structure with a bearish slope full of details.

After the Phase A stop we see how the price mainly trades at the bottom of the range being unable to make any kind of test to the top, which suggests some underlying weakness. Gradually the volume decreases with respect to that seen in the SC and after the appearance of the Shakeout a sign of strength is now able to send the price to the top (minor Sign of Strength).

At that point we can already see how the lows of Phases A, B and C travel a ridiculous distance to the downside, suggesting the appearance of the Shortening Of the Thrust (SOT) pattern and its bullish implication in this case.

Although the first upward move is not strong enough to break the structure, it is already a certain change of character to have succeeded in making such a test. At that point the price develops an internal shock to a previous high in confluence with the weekly VWAP but this time the market is unable to test the bottom of the structure, developing a structural failure of strength evidenced in that LPS. Objectively we already have the Shakeout, the strength sample and the structural failure = potential imbalance in favor of buyers.

From then on and through two shows of strength the price manages to break the range and we see how it will look for a confluence zone to develop the test after the breakout (Back Up). This zone is composed of the Creek of the broken structure, the weekly VWAP (green dynamic line) and the Value Area High of the profile. Another example of the functionality of this type of operating levels supported by the context.

DOWNWARD SLOPING DISTRIBUTION STRUCTURE
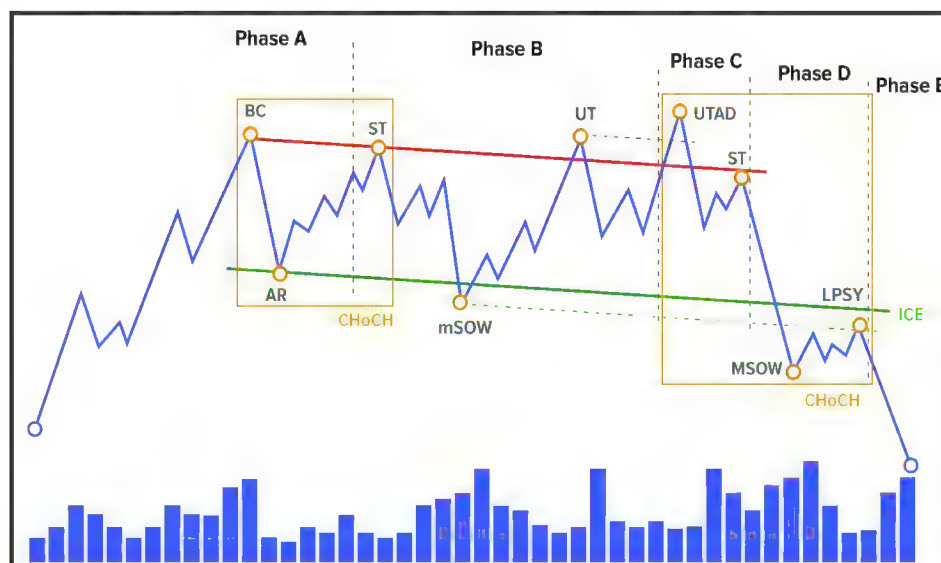
This is the distributive structure with the greatest weakness. After the identification of the first events that suggest the stop of the previous trend movement, the strong condition of weakness that floods the market will cause the development of the subsequent movements in the form of declining highs and lows.

Visually, a bearish channel will be observed where the price bounces at its extremes respecting the dynamics.

The key, as always, will be in the correct identification of the Test event in Phase C that gives rise to the bearish breakout movement. We will constantly be looking for this test event to do so in the form of a shakeout (in this case, Upthrust After Distribution -UTAD-). It has already been mentioned countless times that it is the event that can give greater confidence to a trader when proposing scenarios and therefore in most cases we should wait for its appearance.

This final shakeout can be expected either in the form of an overshoot at the top of the structure suggesting an overbought condition; or as a local shakeout to some relevant previous high. The more showy and exaggerated the shakeout, the more confidence it will give us as it will suggest that it has captured greater liquidity and therefore the subsequent move will have greater momentum.

The main difference with respect to the cumulative structures that also have a bearish slope is that in this case we will not observe that loss of momentum characteristic of the Shortening Of the Thrust pattern, nor will we see any kind of structural failure.

It is certainly a difficult type of scenario to trade as subjectively the trader observes how the price is relatively low and may determine that it is not the place to go short. But we must work to eliminate subjectivities

and remain with the certain objectivity that this type of reading provides.

Due to the almost total control that sellers have, the price will move with great speed. We must be fully focused otherwise we will most likely miss the move. And this is not bad news because if you have been able to make a correct reading and see that the imbalance is in favor of the bearish, you may lose the trading opportunity for not being quick in your decisions, but at least you will not be in a position to enter on the wrong side of the market (buying) thus avoiding a loss.

In this example of redistribution with bearish slope we see that the stop occurs with a large volume during the entire development of Phase A and that during Phase B we also observe unusual volume peaks, characteristic footprint of distributive schemes. In addition to that the bearish waves Weis predominating at all times.

The price manages to position itself below the high volume node and a subsequent upward retracement movement will test this area leaving the Last Point of Supply event to generate the effective bearish breakout (SOW) from there. Once below the structure, a new test to the lower part of the structure and continuation of the fall.

A trader who does not take into account this dynamic of structures and who does not know how to analyze judiciously all the traces within himself would most likely see the price fall, away from the VWAP, in a possible oversold condition and perhaps have a bullish bias. But the truth is that the market at all times was flooded with weakness and this was reflected in the price action and volume.

New example of distributive scheme with very characteristic footprints. Volume spikes, predominant Weis and a Phase C jerk that originates the bearish breakout movement.

The UTAD test happens at a very important location, at the VPOC of the range. It is the most traded price level. Moreover, it converges with the top of the structure. It is the ideal location to look for a short trigger. Another example of how the Volume Profile can help us to better analyze the market context.

Such was the underlying weakness that there was no possibility of a test after a breakout (LPSY) on the lower part of the structure.

UPWARD SLOPING DISTRIBUTION STRUCTURE
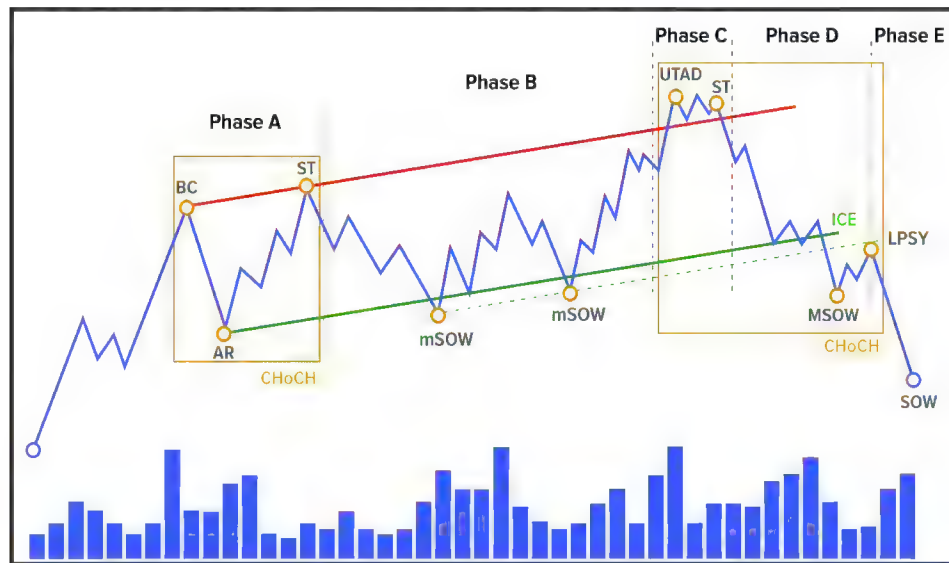
This type of dynamics initially presents certain background strength, evidenced by that succession of rising highs and rising lows until in its final development the aggressiveness of the sellers becomes evident rotating the structure as distributive.

As discussed in the previous structures, a useful tool for its evaluation can be the identification of the Shortening of the Thrust pattern. In this case, the price may make new highs but travel little distance from the previous highs, denoting that lack of momentum.

If it also leaves some kind of structural failure that denotes weakness (does not reach the top of the structure), it is a further indication that suggests that control may be rotating to the bearish.

As always, the reading will be enhanced by observing a shakeout (UTAD) either to the upper end of the structure in the form of an overshoot reaching an overbought condition; or to some relevant prior high.

Let's not forget the analysis of complementary tools that analyze volume data, such as Volume Profile and Weis wave analysis either. The location of the operating zones of the Volume Profile will always help us in making decisions, while the wave analysis will allow us to put the magnifying glass on the interest traded in the movements and will sometimes be key to a correct analysis.

Example of distributive structure with upward slope and without extreme shakeout. As more important details we see that climatic volume in the middle of the range. It is a warning sign as they should not appear as a general rule in cumulative schemes and therefore could be a footprint to add in favor of bearish control.

Very visual also the Shortening of the Thrust pattern between the highs set by the AR in Phase A, the UT in Phase B and the UTAD in Phase C. New highs but with little movement between them suggesting that loss of momentum.

On the Phase C UTAD we see how the price tries to leave the value area of the Composite profile and is rejected. The market is not interested in trading at higher prices and a new signal is added in favor of sellers.

This action could also be seen as the test event in Phase C where it shakes out highs from within the structure. No doubt this is a difficult scheme to trade in real time.

After a first movement of weakness the price manages to position itself below the VPOC of the profile and this action is accompanied with a large bearish Weis wave. At that point the directional bias should be clear and we are already in a position to propose a short trade idea.

Again we see the great importance of taking into account the volume levels. The test after breakout (LPSY) is going to look for the confluence zone of the broken structure and the VPOC to start from there the bearish continuation in Phase E.

This time the test event in Phase C if it manages to reach the top of the structure shaking all the highs of the same. As we know, this action adds further strength to the bearish scenario.

It is very striking the degree of bullish slope, suggesting at the beginning of the same a great strength in the background. Strength that is dissipated and blocked with the appearance of the volume peaks during the development of Phase C.

Unquestionable sign of weakness that sends the price to the origin of the movement in the AR and also manages to develop a new bearish leg. Not before going to visit twice the most traded volume level (VPOC) of the structure to continue trading down from there. Once again, this is an impressive demonstration of the effectiveness of these volume levels.

All the concepts related to the Volume Profile and its trading implications will be explained in depth in the last part of the book.

1.7.2 UNUSUAL SCHEMES

Within this category we will include all other structures that do not follow a horizontal or sloping formation.

If we wanted to get exquisite we could frame as Wyckoff methodology structures practically all accumulation or distribution ranges regardless of their shape, including the classic charting patterns that we all know such as head and shoulders, wedges, triangles and so on.

From my point of view trying to justify every single move and structure development under the Wyckoff methodology approach does him no favors. Wyckoff has little to do with those robotic patterns, His study is much deeper so the smartest thing to do would be to distance oneself from that possible link that may associate the classic chartist patterns with the Wyckoff method.

With the benefit of hindsight, as they say, any range can be labeled with some success. But this is operationally invalid. Labeling past charts

is a very interesting exercise for initiated traders in order to put their knowledge into practice and to feed their subconscious to prepare it for real time trading. But once you have a certain level of study of the methodology, continuing to label past charts becomes meaningless

The key is that any structure, if we force ourselves a little, can be turned into a nice structure that would fit perfectly into the events and phases of the Wyckoff methodology. But our focus should not be here, what good is it for me to know the location of the labels in a hypodermic (V-shaped) turn of the market if in real time I am not going to be able to trade it?

As I say, it is a waste of time and energy to try to study unusual structures, mainly because, as the name suggests, they do not appear with any regularity. Our advantage is to wait for classical structures to appear.

Classic structures, with a strict development of their events and phases, but at the same time allowing certain fluidity based on the particular conditions of the market. The perfect example of this statement would be the structures with slope: classic formations where all events and phases are perfectly observed, and at the same time the background condition slightly modifies the final development (some bullish or bearish dynamics)
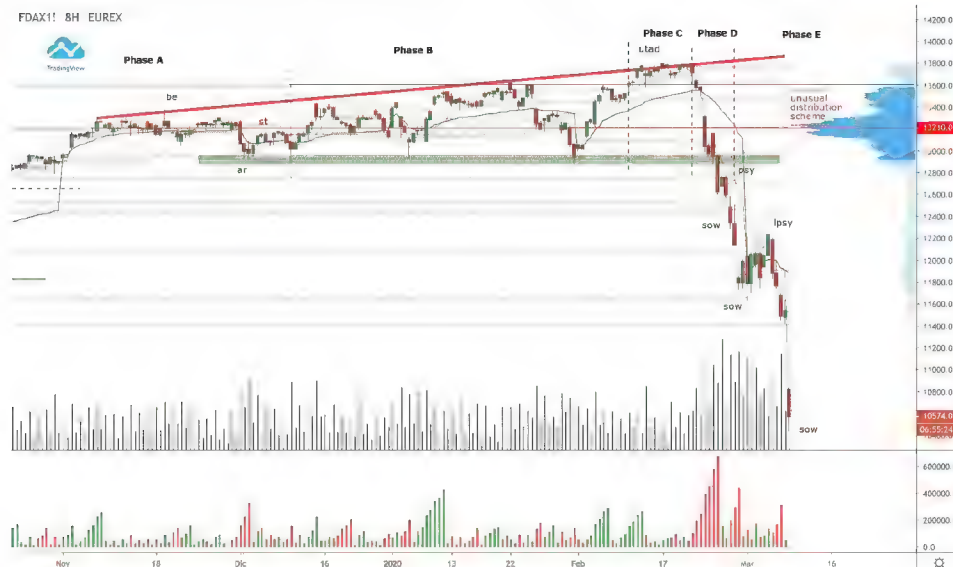
This chart of the FDAX is a very good example of what I am talking about. Once its development is complete I can go back and label every single move if I want, but in real time it is virtually impossible behavior to trade. A structure locked at lows but developing rising highs in turn. It makes no sense to put the focus there.

Besides this type of inoperable structures, it is a good time to remember that theory and practice in real time often do not go hand in hand and that it is necessary to have a sufficiently open mind.
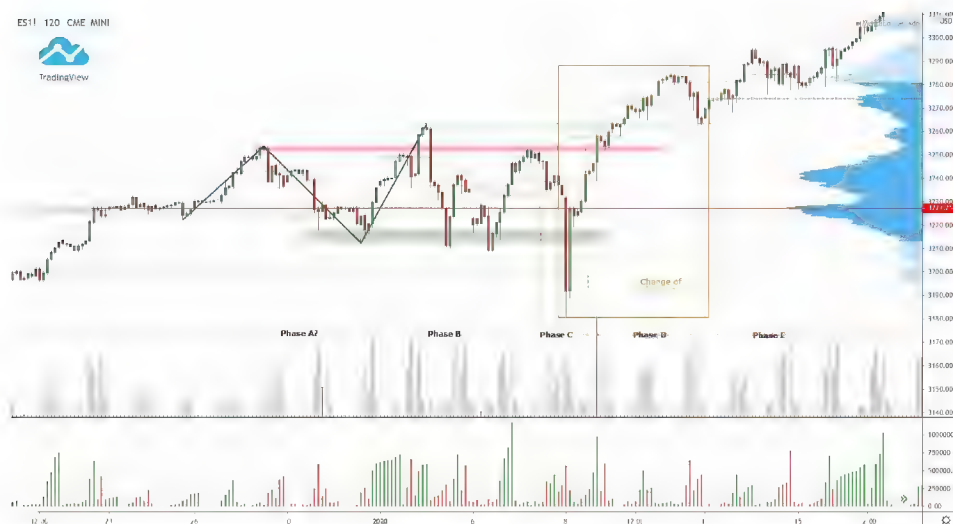
In this chart of the SP500, while it is true that a very genuine structure is observed in its final part, many in real time may have encountered difficulties when trying to identify Phase A.

Price comes up, develops a broad bearish move, and from there another further upward move that surpasses the previous high. Could that succession be the BC, AR, ST? It could, but that is not what is relevant. What is relevant is that a change in character has occurred; that the price has moved from a trending to a sideways state and that a cause is going to be built back up which will have an effect. This is all that matters, the context behind the price action.

Many may still only look for "textbook" structures and, although we see them appearing all the time, the reading offered by the methodology is much more interesting than just staying there

Here is another example of exactly the same. If we observe the market from a strict point of view seeking to identify the perfect movements framed within the proportionality that in theory there should be between phases, we may have problems in identifying them when we see this type of development.

If we treat these three movements that I mark as the SC, AR and ST, Phase B would have very little duration since the only objective event that is observed on the graph is the s shakeout of Phase C. What do we do then if the theory tells us that Phase B should be longer than Phases A and C? Well then nothing, theory is all very well for generalizing events, but real time trading and analysis will require a much more open mind.

Once the trader reaches a certain degree of understanding of the methodology he should focus on seeing the market in terms of price dynamics and not in terms of labels.

PART 2. RESOLVING FREQUENTLY ASKED QUESTIONS

In this section I will delve into some of the most frequent doubts raised by students of the Wyckoff methodology.

It is a source of pride to expose some complex doubt as this is a symptom that the study has been sufficiently deepened. The operator bombards his brain with all the concepts over and over again; and the moment he gets in front of a graph, confusion starts to appear.

This is normal and even more so in a discretionary approach where there are so many elements to take into account. In this part we will address important questions that will help us to further consolidate our knowledge.

2.1 EFFICIENT USE OF LINES

When the retail trader first approaches the markets, he likes to draw lines to identify support and resistance levels in the hope that the market will respect them. But we must know one thing, the market does not care how many lines you have drawn on the chart, nor if they are of greater or lesser thickness or color.

In no case, unless you have a statistical study that verifies it, should the use of lines in isolation be taken into account in trading terms. That is to say, it is not recommended to buy or sell simply because the price has touched a certain line.

The movie that the lines tell us has to do with who is mainly in control of the market. If we observe a bull market in which a clear bullish line or channel can be drawn, the objective reasoning is that the buyers are in control. If what we can visualize is a clear bearish movement channeled between two extremes what we will have is a control by sellers. And finally, a horizontal lateralization with repeated turns on two extremes will evidence a balance between both participants.

Therefore, the idea behind drawing lines, whether to build horizontal ranges, all kinds of channels or simple trend lines should aim

to:

❖ Obtain a further footprint of market sentiment

❖ Give us an interesting location to bias directionality

Let's continue to work with logic. If we have just reasoned that an uptrend line or channel gives us evidence of a buyer-controlled market, with this baseline information it seems that the most sensible thing to do would be to:

❖ Favor purchases.

❖ Only operate in sale after seeing the rupture of such lines (of such bullish dynamics).

Here it should be clarified that the fact that the market is rising does not mean that a trend-following strategy (in this case a buying strategy) will necessarily have better results than a counter-trend strategy (in this case a selling strategy). It is simply a matter of identifying where the path of least resistance is (through the upward or downward dynamics) since looking for additions in its favor would offer us a priori trading with a greater chance of success (since we are operating in favor of who has control).

Whether you want to buy or sell when identifying a bullish channel, which locations would be the most appropriate to look for trades? There is no doubt that the most optimal would be to wait for the price at the extremes.

If what you are looking for is to anticipate a market turn (which is not recommended), at least wait for the break of the trend line that determines the latest dynamics that the price is following. It could be a

footprint of momentum loss although without taking into account anything else any trade to try to turn the price would seem too risky.

Now, and continuing with the example of the uptrend, if the price is approaching the bottom of its channel or trend line, is the fact of being in this location reason enough to buy? Absolutely not, except for the exception mentioned above.

In this example what we observe is that the price is following a dynamic that goes through visiting both extremes; and under the principle of favoring that the market continues doing what it has been doing previously, it would be interesting to look for the incorporation in purchase looking for a new impulse to the rise. But that's it, at this point the power of the lines ends. It gives us a fingerprint on market sentiment and can help determine market bias. Based on the price dynamics we would find ourselves in an interesting area to look for buying, which does not mean that we should necessarily buy.

It is best used in conjunction with other analytical tools, such as the Wyckoff methodology approach. If we identify the price in a location where it is interesting to look for buying, instead of buying directly, how would we look at the possibility of waiting for the price to develop some cumulative pattern in that area? This would seem to be a useful use of the lines.

1. Identify price dynamics

2. Wait for it to reach some extreme to bias directionality

3. Look for the development of some accumulation/distribution structure

2.1.1 THE IMPORTANCE OF THE CONTEXT

If through the analysis with the lines, whether trend lines or some type of channel, we determine that we are in an interesting operating zone (in extremes), it could be the moment to, if the trader so decides, go down in timeframe to look for a lower accumulation/distribution scheme on that location.
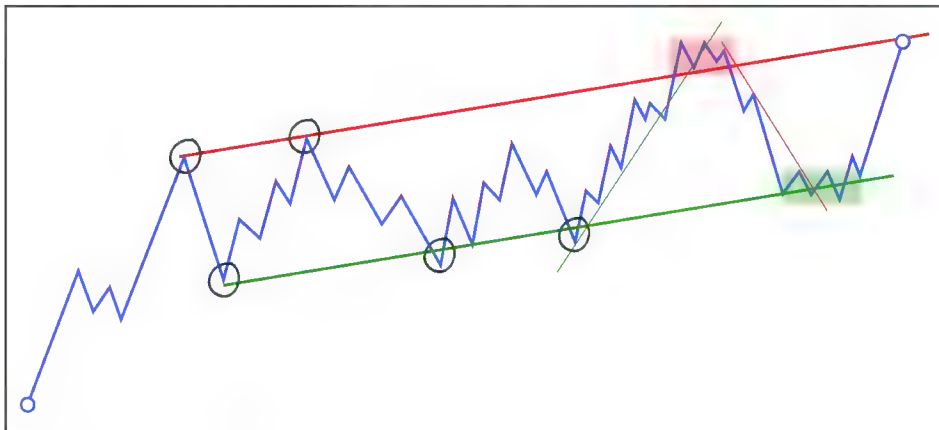
Analyzing a high seasonality chart, we would be located in an interesting area for that turn to occur, looking for a movement to the opposite extreme, so an efficient use of the context would be to go down in seasonality to try to operate that minor accumulation structure that will generate the turn.

As we can see, the predictive power of the lines by itself is not very convincing; but used together with other tools they can offer us an operationally interesting use.

2.2 LABEL CHANGES AND SCENARIO BUILDING

As market control may change during the development of a structure, we need to make a continuous assessment of price action and volume as new information is coming into the market and being displayed on the chart. Based on this, we will always give greater relevance to the latest information available to us.

When we propose a scenario, we always do so taking into account all the information available so far, that is to say, based on the market conditions at that present moment. The present moment is the most important thing, and the second most important thing is what immediately precedes it.

That is why sometimes what a particular action may initially suggest to us, may change condition as all movements have to be confirmed or rejected by the subsequent price action.

There is no point in keeping a scenario permanently active. Many detractors of technical analysis use this very thing to try to discredit it. They see an approach and cannot conceive of the fact that it can be modified. The reality is that the market is not static and that every

moment is unique where new data keeps coming in uninterruptedly.

This is why we will sometimes be forced to vary the sentiment of a behavior and therefore the label we initially gave it. As we have already mentioned, labels are not really important; what is important is the action behind them, what that movement suggests to us. And what that movement suggests to us is determined by the action that follows it.

It may be that what at first appears to us to be a shakeout with a test function in Phase C (to give rise to the breakout and continuation out of range), is simply a test denoting intentionality in that direction. But we can only assess this after seeing the subsequent price action.
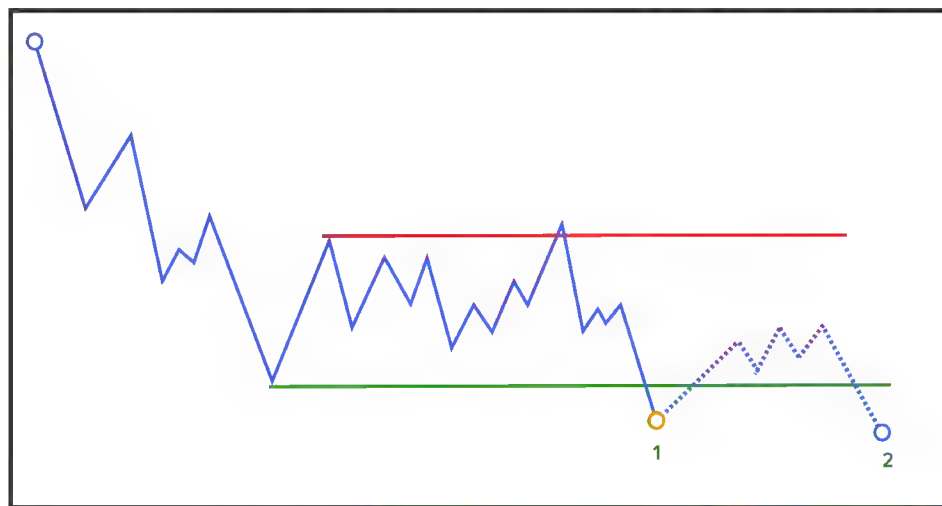
For example, if a potential Spring fails to develop even one bullish move that denotes some strength (at least a minorSOS), that action would have to change sentiment and instead of seeing it as a bearish jolt that biases us directionally to the upside, see it more as a test of weakness.

In the example chart, as the price is at point 1 we would say that we are in a potential Spring situation. When we see that it does not develop any signs of strength our sentiment about the stock should be changing and when it makes a new low at point 2 the label should be a simple test.

In addition, it is also important to keep in mind that we can only pose solid scenarios on the next move and never beyond. Based on what the price has been doing, we will give probability that a certain move will develop later. And when this is finished, we will be in a position to propose the next one. It makes no sense that for example we are in Phase B and we are already suggesting the possibility of a cumulative or distributive scheme. This is totally out of place.
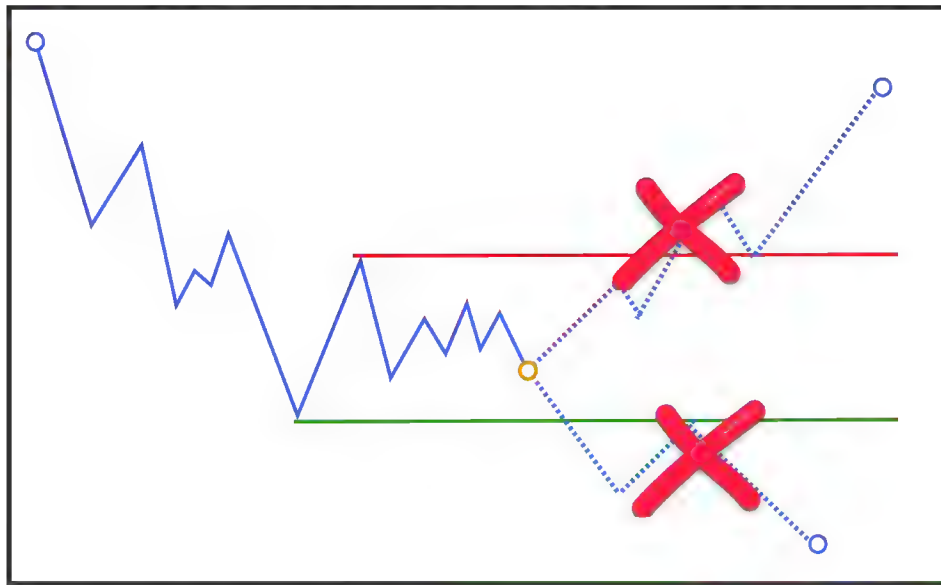
And herein lies one of the advantages of the Wyckoff methodology, in the fact that it provides us with a clear roadmap, a context on which to wait for price movements. When the price is in a position of potential bearish shock (Spring) and our analysis confirms it, we will wait for the subsequent bullish breakout move. And when this develops in the way and form that we expect (with increasing price and volume), we will be able to pose the next pullback move to the level of the broken structure. And when we are in such a BUEC position, we will be able to evaluate to raise the subsequent trend movement out of the range.

This is the dynamic, it is not a question of inventing anything but simply to follow and evaluate in real time the price action and the volume

in order to propose the most probable next move.
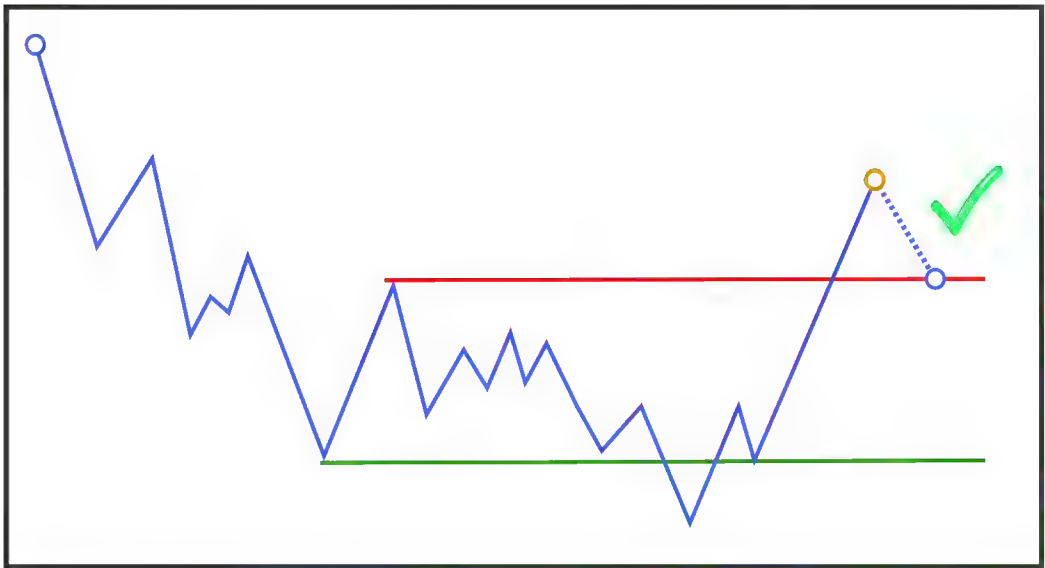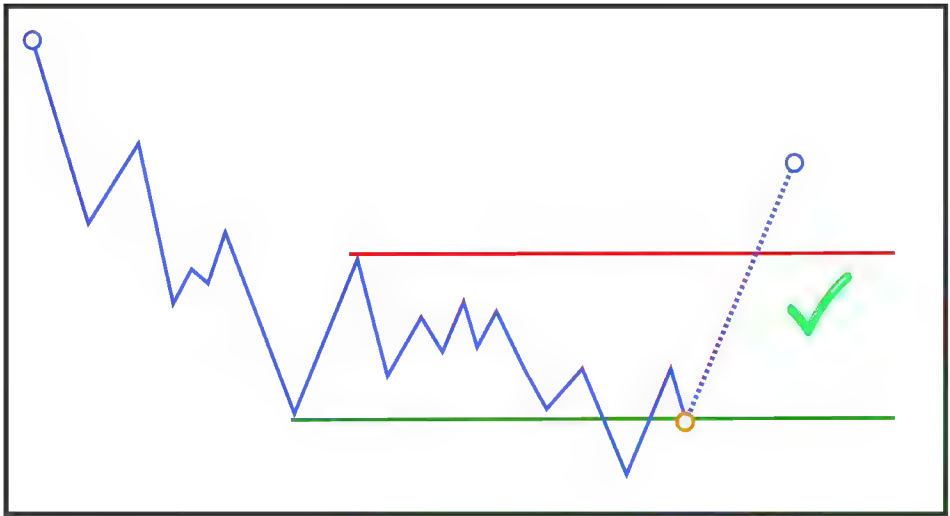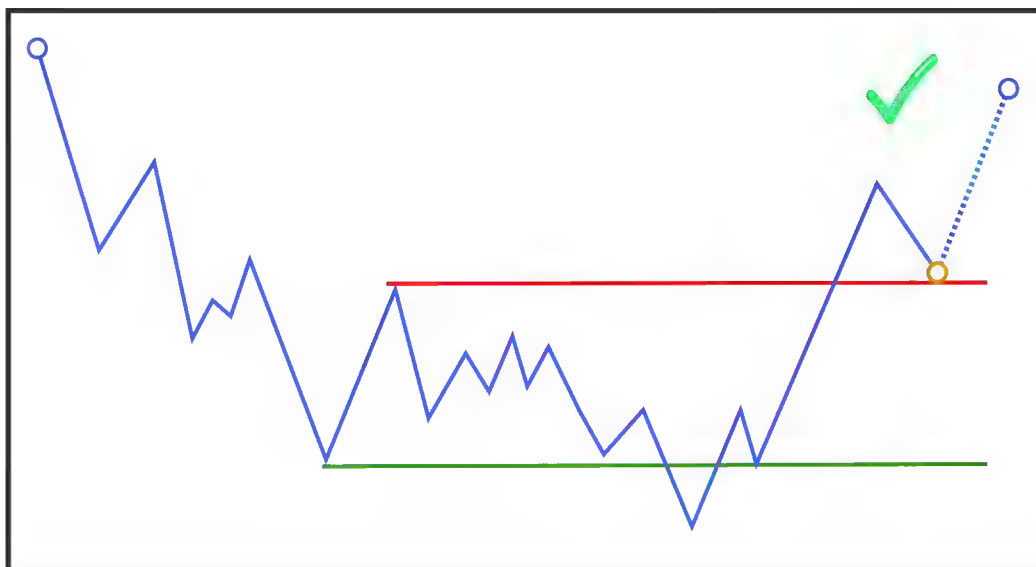
The reason is simple; and the reasoning is found again in the previously seen casuistry of failed schemes:

❖ **We do not know the intent of the traders who are supporting the current move**. If they are short term traders who will close positions in the next liquidity zone or if on the contrary they have a longer term perspective and will continue to support the movement until the full development of the structure.

❖ **We do not know whether traders with greater capacity may intervene**. At the moment of truth, in the test after the breakout that would confirm the directionality of the structure, aggressive traders with a greater ability to move the market may appear, pushing in the opposite direction, since in the longer term they may have a different vision.

2.3 HOW TO DISTINGUISH BETWEEN ACCUMULATION AND DISTRIBUTION?

This is the most recurrent doubt and it is totally logical because if we had found the objective answer, we would have finally found the definitive strategy to make money easily.

But no, unfortunately this is not the case. In real time it is not possible to know what it is really about; whether it is about accumulation or distribution. The only time we can confirm what in that range has happened is when the full development of the structure takes place; when we have the cause and effect fully developed. This is the field of work of all those who analyze charts in the past. Let us move away from this.

When everything is finalized it is no longer of any use to us, it is too late to take advantage of the market. We need to enter the market before the effect of the cause is fully developed.

When we pose a scenario we always speak in conditional terms using the word "potential" as there is no certainty about anything. The market is an environment of total uncertainty and our focus should be on analyzing the traces we are observing up to the present moment as objectively as possible with the purpose of trying to determine where the

imbalance will occur.

As we have studied in the content of the first book "The Wyckoff Methodology in Depth", there are certain signals that are informing us during the creation of the cause who is taking control of the market. Below we will make a sort of summary highlighting the most important points to take into account when assessing market sentiment.

1. TYPE OF TEST IN PHASE A

This is the first indication of the whole structure to be evaluated. The generality is simple: we will divide the vertical distance of the structure into two parts and depending on where the Secondary Test takes place, it will give us some information about the condition of the market up to that point.
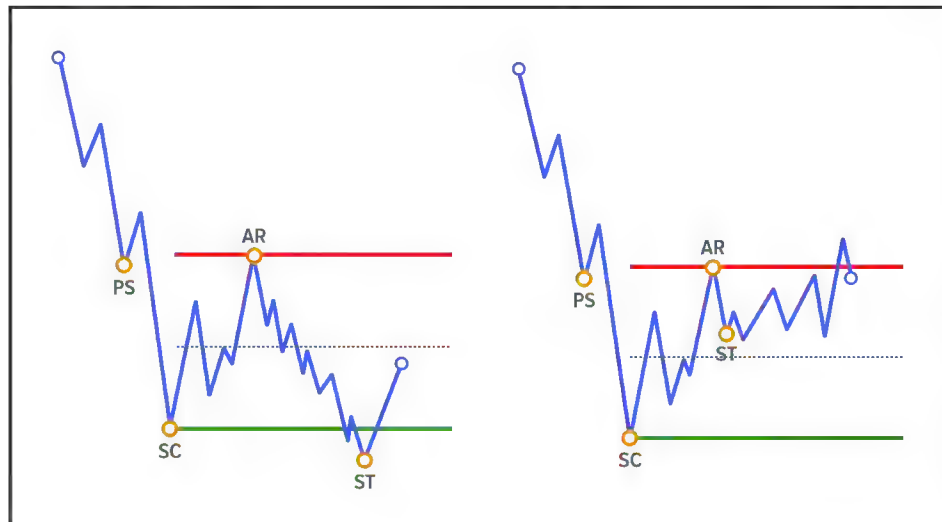
❖ If the Secondary Test develops at the bottom of the structure, or even below the lower end, it will be indicating some underlying weakness.

❖ If the Secondary Test ends at the top of the structure, or even above the upper end, it will denote underlying strength.

Analyzing the type of test in Phase A is a very early action in the development of the structure, but it is interesting to evaluate from the beginning with what condition the subsequent development starts. It is a matter of adding up indications in favor of one side or the other (buyers versus sellers).

2. TYPE OF TEST IN PHASE B AND REACTION

This is the second of the traces with which we can evaluate the apparent strength or weakness of the market.

From a general point of view we will draw two clear conclusions:

❖ Test to the top of the structure would denote strength.

❖ Testing at the bottom of the structure would denote weakness.

The logic behind these conclusions is that it is impossible for the price to move to reach that end of the structure and even cause some penetration if there are no major traders supporting that move with conviction. This gives us some confidence in determining whether a move has harmony in its development.
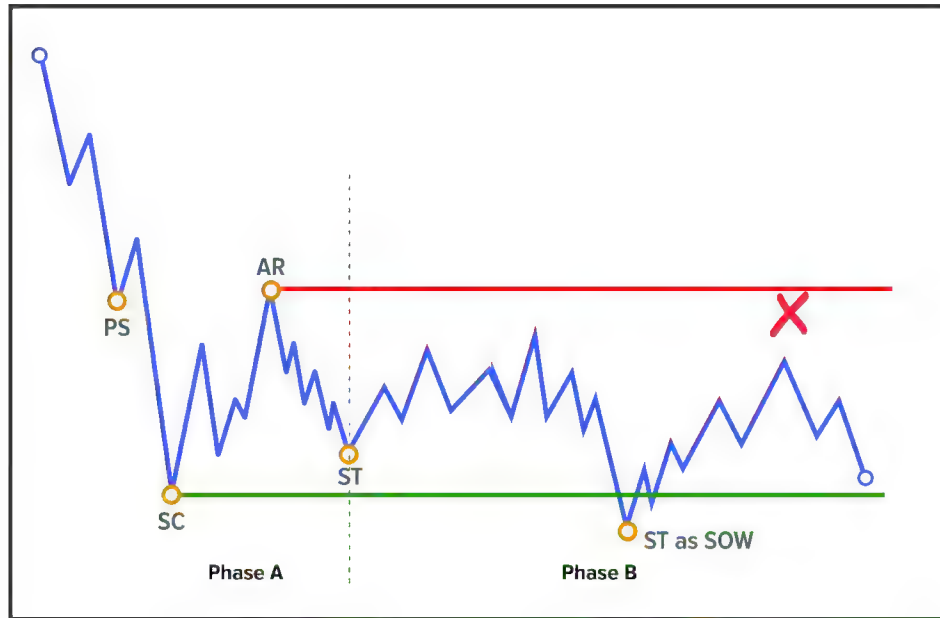
Generally speaking, since it occurs at a very early stage in the development of the structure, this type of test would denote some urgency in the direction in which it occurs. A test at the high end suggests buying momentum while a test at the low end would indicate great market weakness.

A subsequent evaluation of the price action will help us to determine whether this movement has served to trigger the stops of traders who are positioned on the opposite side, thus freeing the market from resistance; or whether, on the contrary, the movement has been used to enter aggressively in the opposite direction.
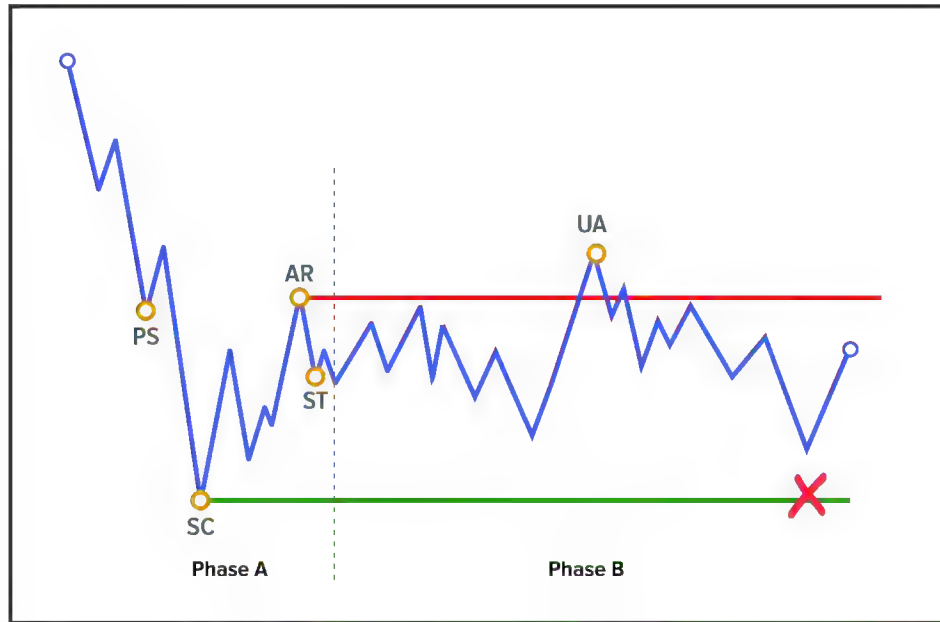
In other words, a test of the upper part of the structure that manages to break the highs at least slightly and reaches this liquidity zone can be read in two ways:

On the one hand, **such a move may have served to absorb the stop loss orders of those who are positioned short**. With this they manage to eliminate that downward pressure to subsequently initiate the upward movement at a lower cost. This action would be confirmed later when observing that the price finds some support and is unable to continue falling.

On the other hand, **other large traders may have taken advantage of such a test move to the highs to enter into a sell-off**. Such an action would be confirmed later with a visit to the lows of the structure, a genuine representation of weakness.

Therefore, what happens after such a test will be very useful for our analysis. We could even be facing a Phase C test event, hence the importance of evaluating the subsequent price reaction. An inability to

visit the opposite extreme would alert us of a structural failure, which would add strength in the opposite direction; because if it really was the shock in C the price should at least reach the opposite extreme almost immediately.

This type of behavior with test at one end and then structural failure at the opposite end is generally characteristic of schemes that initiate trend movement out of the range without prior shakeout at the full ends of the range.

For the case of the cumulative example the test above (UA) plus the inability to reach the bottom denotes a lot of underlying strength and most likely the market will generate the bullish breakout from somewhere in the middle of the structure (LPS) without developing that Spring that we always look for at the bottom.

In the distribution example, the test at the bottom (ST as SOW) followed by the inability to develop a test at the top of the structure denotes a lot of weakness and most likely the market will develop a LPSY as a Phase C test event.

3. THE SHAKEOUT IN PHASE C

The third and main footprint. This is the dominant event in our analysis and approaches.
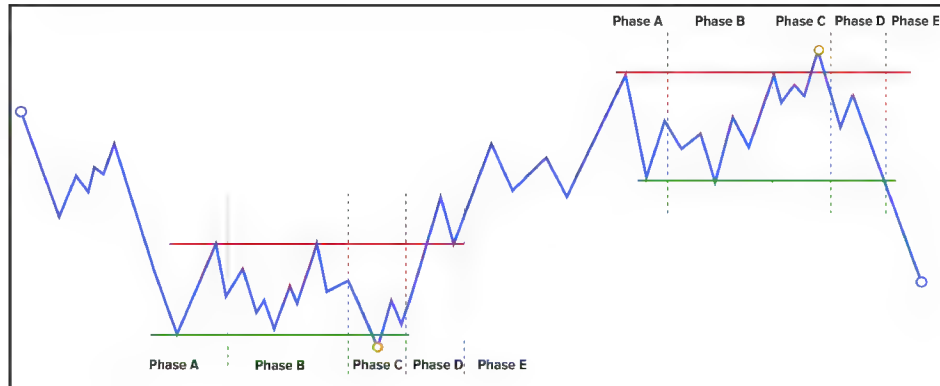
It is the behavior that gives us the most confidence when trading. A shakeout into a liquidity zone plus the subsequent re-entry into the range denotes a strong refusal of the price to continue moving in that direction and at that point the path of least resistance is to the opposite side.

The minimum objective of a shakeout is the visit to the opposite end of the structure; and if we are facing the test event in Phase C, it will give rise to the effective breakout and subsequent trend development out of the range.

The most important thing when analyzing a chart is the present, what the price is doing right now in relation to what it has been doing. And the second most important thing is the immediate prior to the present. That is, if the current movement is preceded by a shock, that shock is the dominant event that would mark the directional bias of our analysis.

As the market control may vary during the development of the structure, we need to make a continuous evaluation of the new information coming into the market. Then, we will always give a higher relevance to the latest information available to us.

Does this mean that the shock is of greater importance than any other action that has occurred previously in the range? Absolutely yes. By the very nature of the motion, the shakeout alone should be valid enough

to bias us in favor of its direction.

Do we then discard the previous analysis? At the operator's discretion. From my point of view they are small traces that add up to the analysis as a whole. It is a matter of analyzing objectively and adding up indications in favor of one side or the other. And remember that such shakeout does not always appear at the extremes. As we have just seen in the previous section, knowing how to read the traces alerts us to the imminent development of the effect.
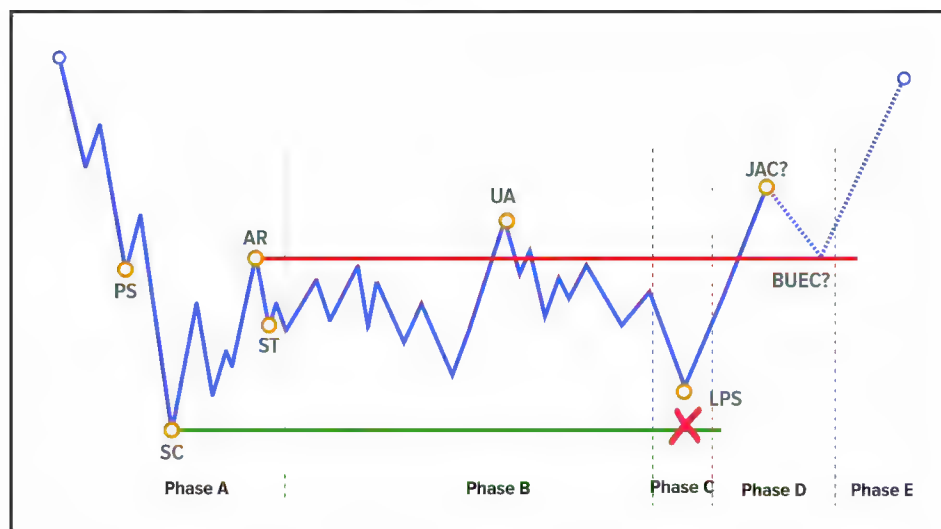
If we are in a situation of potential bullish breakout and previously we have not had a Spring to the lows of the structure but we do have a test at the top and subsequently a structural failure below, we know that such behaviors are characteristic of cumulative schemes whose test event in Phase C is a simple LPS and therefore we will be equally in a position to favor the BUEC and bullish continuation.

4. PRICE AND VOLUME ACTION IN PHASE D

This footprint simply tries to apply the Law of Effort and Result between price action and volume.

We want to see candlesticks that denote intentionality in favor of the move subsequent to the shakeout and this intentionality is represented by wide ranges and high volume (SOS/SOW bar).

The real value of a shock is seen in whether it has continuation or not. As already discussed, all actions must be confirmed or rejected later. We could be in position for a potential shakeout and initially treat that action as such; but if the subsequent move that is the breakout of the structure does not develop, market sentiment changes.

The shakeout is a search for liquidity but which must also be capable of subsequently generating a move with some momentum that at a minimum reaches the opposite end of the structure and preferably causes its breakout.

For example, if we look at a potential UpThrust After Distribution (UTAD), ideally we would want to see that it is followed by a move with

strong bearish momentum that manages to break the lows of the structure to continue the distributive development. If due to the condition of the market it fails to break the structure, we should at least require it to reach that low leaving such a move as a minor Sign of Weakness (mSOW). Otherwise the market would denote some underlying strength and question whether it was really the genuine shakeout.
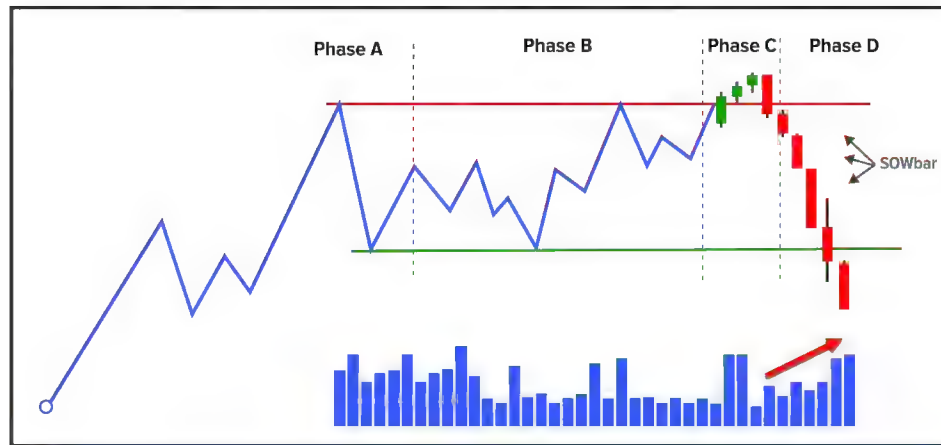
That the price is moving with wide ranges, good displacement and an increase in volume is the ultimate representation that such a move is being supported by large traders. The market could not develop such moves without their intervention.

On lower time frame charts such a move of intentionality will be observed as a succession of lower highs and lower lows, the ideal representation of a healthy bearish trend movement.

In the specific action of the breakout we want to see the appearance of high volume suggesting intentionality and absorption of all passive orders placed in that liquidity zone. There may even be times when a wide offset candlestick appears with a wick at its end. For example, in the event of a bullish breakout attempt, this type of candlestick with a wick at the top could initially suggest the possibility of a shakeout, since such a wick

objectively indicates the possibility of a sell entry. But we must remember that we are in liquidity zone and therefore the execution of these orders would be within the expected range. The key is the ability of buyers to absorb this supply, keep pushing and not let the price re-enter the range.

While it is true that we could see a genuine breakout on low volume (due to lack of interest from the opposite side), under normal conditions an absence of volume on such behavior would initially put us more in the position of treating the action as a potential shakeout; although obviously we would have to wait for the subsequent price reaction.

Therefore, the most visual characteristic of a genuine breakout move will be to observe a wide range candle that manages to close near the extreme and is accompanied by high volume. We can then state that this trace is the second in importance after the shakeout.

5. THE OVERALL VOLUME DURING RANGE DEVELOPMENT

The third most important footprint. As a general rule the volume in isolation during the development of the structure also shows a certain identifiable pattern:

❖ Accumulation processes will be accompanied by a decreasing volume during the development of the structure.

❖ In distribution processes, high or unusual volumes can be identified during the development of the range.
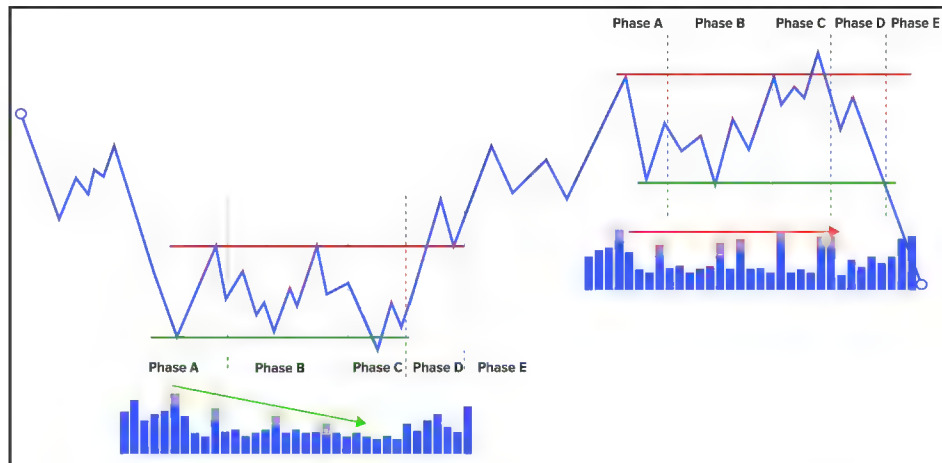
This is obviously a general pattern, which means that this will not always be the case.

For the cumulative example, a decreasing volume suggests that a process of absorption of the available stock is taking place. As many traders are initially willing to sell, more transactions take place, leading to higher volumes. As time is consumed during the development of the range, units continue to be exchanged but obviously with decreasing intensity, which is represented as a decreasing volume. By the time the generation of the Phase C test event is triggered, practically all the floating supply has been eliminated.

This is quite different in distributive processes. An important characteristic of these schemes is that they tend to develop much faster than cumulative ones. And this is the reason why you can see large price fluctuations and high and constant volumes. This shorter duration forces transactions to be executed with a certain speed; while in cumulative campaigns a certain amount of time is consumed until stocks are exhausted, in distribution processes the urgency to sell causes a rapid development accompanied by high volatility.

6. ANALYSIS OF THE WEIS WAVE INDICATOR

This tool has nothing to do with the conventional indicators known to all.

The Weis Wave indicator collects and analyzes volume data to graphically represent the accumulation of transactions made by price movements. In other words, depending on the configuration we assign to it, the first thing the code does is to identify the start and end points of a price movement. Once this is determined, it adds up all the volume traded during the development of that movement and represents it in the form of waves.
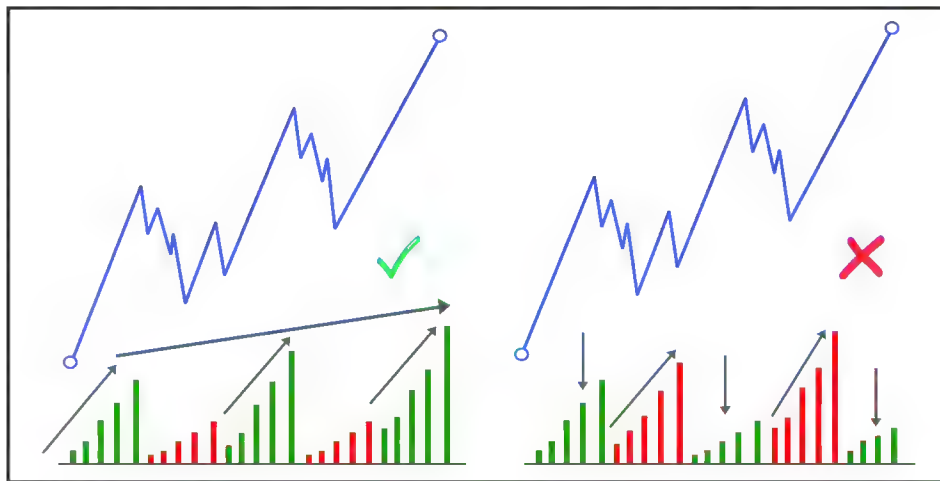
As can be seen in the graph, all waves start from a base set at 0 (the same as the classic vertical volume).

This tool is basically used to perform analysis under the Law of Effort and Result. When developing such analysis we can approach it in different ways:

❖ **In the development of movements**. The basic rule when looking for harmony and divergence is that the movements that we initially treat of impulsive character should be accompanied

by big waves, increasing waves with respect to the previous ones, which would suggest an increase of interest in the direction of that movement. On the other hand, corrective movements should be shown with small and decreasing waves in comparative terms, suggesting a certain lack of interest in that direction.
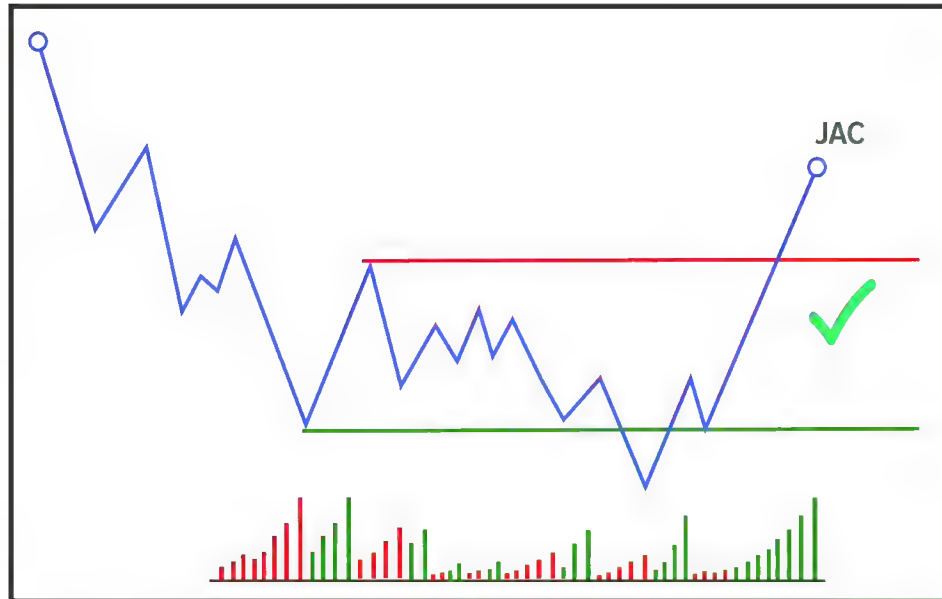
❖ **Upon reaching trading zones.** Similarly, a harmony analysis would be obtained by identifying a large bullish wave whose price movement manages to break a resistance zone. The reading we make is that this movement of impulsive character has achieved the effective break. With respect to an analysis that would suggest divergence would be to visualize the same bullish move that breaks a previous resistance but does so with a very small Weis wave, denoting that very little volume has been traded and therefore suggesting that the large professional is not supporting the move.
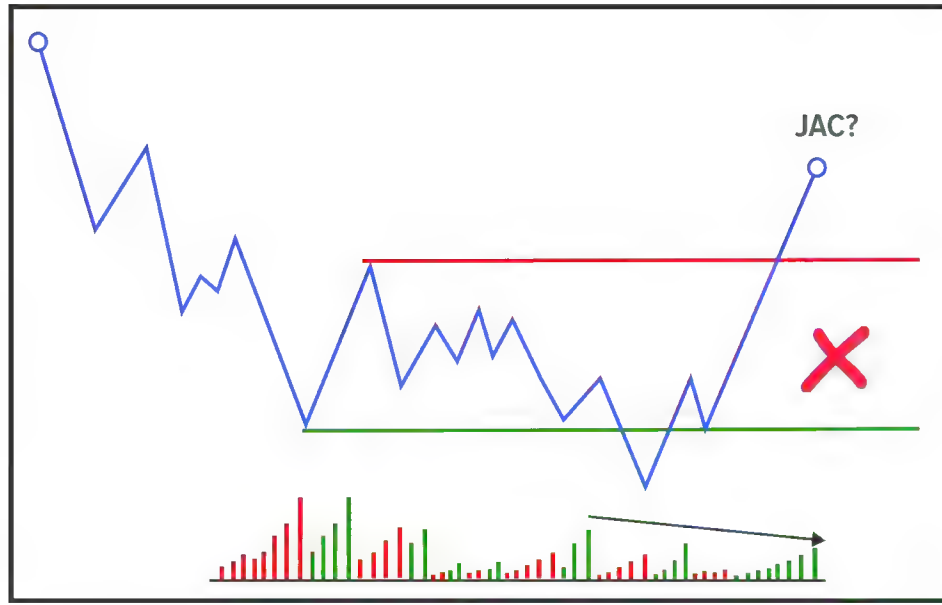
We must again be mindful of the importance of continuous analysis. We may see a potential Spring which is followed by a bullish move accompanied by a large Weis wave that manages to break the Creek of the structure (so much for the ideal scenario). At that point we will be favoring bullish continuation (potential BUEC); but strong volume may come in and push the price back into the range and a large bearish wave is observed, now suggesting the possibility of potential Upthrust.
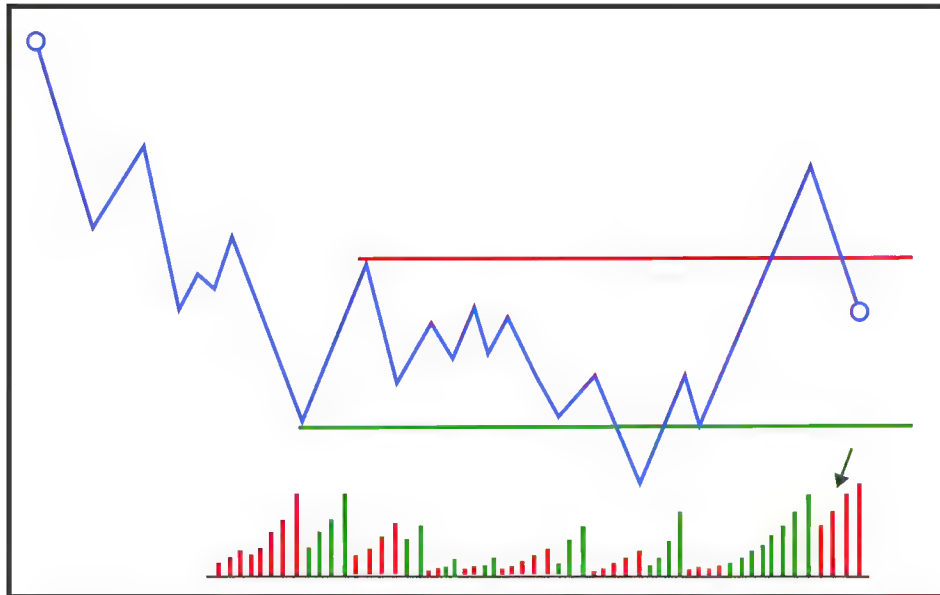
The idea is that just because we see that the footprints are in favor of the initial approach it does not necessarily have to develop. As previously discussed, new information is continually entering the market and we must be aware of this. In the example above, in a potential BUEC situation, we will need to see bearish waves that denote lack of interest in order to more confidently propose a bullish scenario.
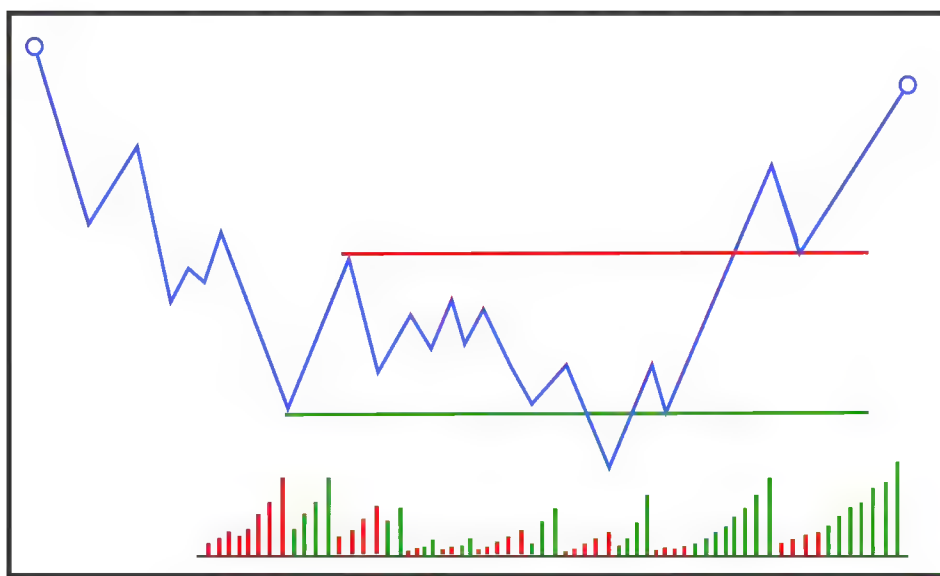
2.4 HOW TO ANALYZE A CHART FROM 0?

This is one of the first barriers encountered by the beginner trader who starts analyzing charts for the first time from the point of view of price action and volume.

The first thing that should be made clear is that a chart, the cleaner the better. It is no use having a hundred thousand objects drawn on it. The only thing we get with this is to hide the information that is really important: the price. That is why I am in favor of, as soon as a structure has been fully developed, eliminating absolutely everything labeled. In this way we discard the possibility that everything plotted can interfere in further analysis. At most, leave the levels of the structures drawn to visually see quickly where we are coming from.

In this type of analysis where what we seek is to understand what the context of the market is, it is essential to start the analysis from higher time frames to go down in time from there. But from what time frame in particular to start? From whichever one is necessary. Generally the weekly chart will already show all the relevant price action and it will not be necessary to go up to the monthly chart.

Once the chart is open, the first thing we are going to look for are the stop events of any trend movement and the subsequent sideways

movement of the price. Operationally what we are interested in is to see that the market is building the cause of the subsequent move; that is, that it is in Phase B.

Obviously on many occasions you will open the chart of an asset and see absolutely nothing clear, or it may still be in the development of a trend movement that has been preceded by an equilibrium range. In these cases there is nothing to do but wait to see that change in character that determines the appearance of Phase A.

At other times you will identify those stop events plus the generation of some cause in Phase B and the market may find itself in a potential breakout/shakeout situation. This is the ideal context to move down the time frame.

It is a matter of identifying in this higher time frame the general context to determine which scenario would be more interesting to work on, whether to propose a long or short entry. In short, effectively positioning ourselves on the longer-term chart helps us to bias the directionality of our future scenarios.

Until we are clear about the context of the upper chart, we will not be able to go down in time. By context we mean the combination of structures and operating zones:

2.4.1 STRUCTURES

This is where the importance of having thoroughly studied the

whole theoretical section of the first book "The Wyckoff Methodology in Depth" comes in. Structures provide us with a clear roadmap that will guide our scenario approaches. For example:

❖ If we are in Phase B building cause, we are going to wait for price at the extremes of the structure to look for breakout/shakeout action.

❖ If we are in a position to confirm a shakeout, we will wait for price to reach the opposite extreme with some momentum.

❖ If we are in position for a potential genuine breakout, we will wait for some kind of test to the broken structure to continue the development out of the range.

If we do not really know how the market moves from this point of view of structure development it is impossible for us to pose judicious scenarios. Therefore, the first thing to do is to internalize how these accumulation and distribution processes generally develop:
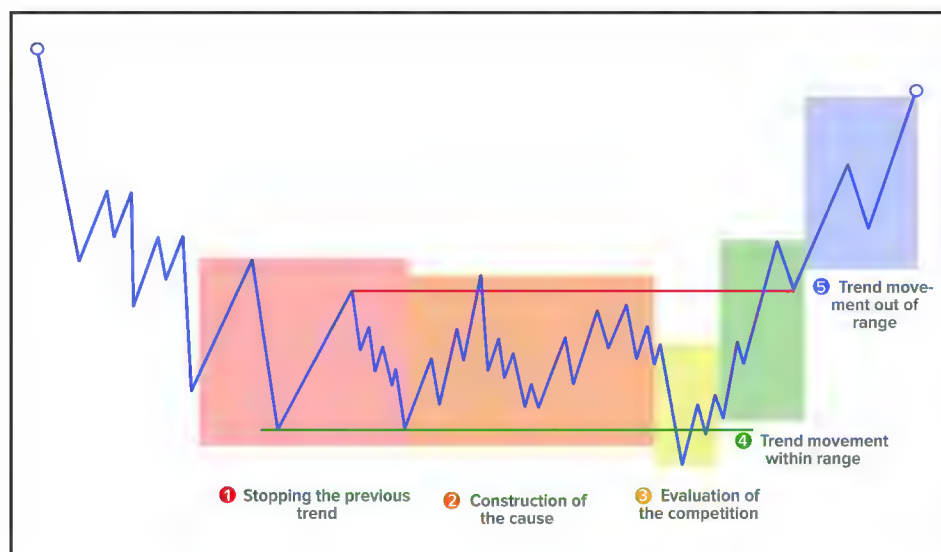
1. Stopping of the previous trend

2. Construction of the cause

3. Evaluation of the opposition

4. Trend movement within the range

5. Trend movement out of range

2.4.2 TRADING ZONES

The objective is to identify the location of the trading zones according to price levels.
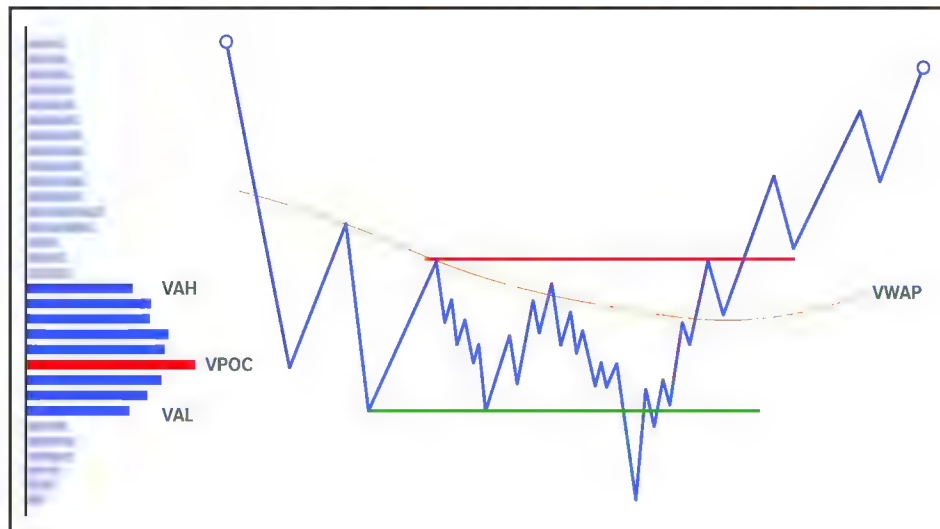
To do this we are going to use the Volume Profile tool. Although we will deal with this tool in depth later on, for the moment we are going to keep in mind that it helps us to identify trading zones as well as operating levels based on volume that will be very useful for the planning of scenarios, among other things.

As the market moves from one equilibrium zone to another, we must know where we are at the present moment and what the trading zones above and below are to take them into account as possible targets to visit.

The Volume Profile is a tool that adds objectivity to our analysis and in confluence with the reading of the market offered by the Wyckoff methodology enables us to better determine who is likely to be in control of the market.

2.4.3 LOWERING TEMPORALITY. STRUCTURES FROM HIGHEST TO LOWEST.

Once this general context is clear; that based on where the price is on the upper chart we determine as more interesting to raise longs or shorts; and that we have identified the trading zones both above and below, we can move down in time frame to start a new analysis there.

We could then open the 8, 4 or 2 hour chart as an intermediate time frame.

Once the first more general analysis is done (on the monthly, weekly or daily chart), we may determine that the market situation is favorable to look for a buy entry. At that point, it would be interesting to see the development of a minor accumulation structure that would support such an idea. For example:

Local accumulation as Spring?
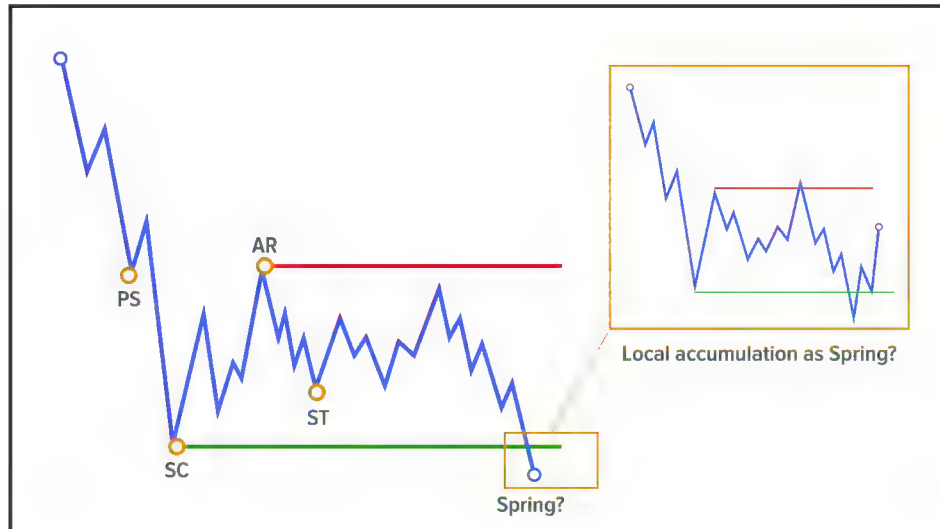
Spring?

❖ If we are in a potential Spring situation (Phase C) of the above time frame, looking at footprints in a minor structure suggesting some buyer entry would be the ideal situation. On the one hand we are in an interesting operating situation of the macro structure and at the same time we observe a potential cumulative minor structure. We would be facing a potential cumulative minor structure that, if confirmed, would act as a function of the potential Spring of the major structure.

❖ If we are in a situation of potential BUEC (Phase D) after a bullish breakout and the analysis of the traces accompanies, in that position we should favor the continuation of the roadmap of the development of the structures and therefore look for a minor structure of re-accumulation in function of test to the broken structure to continue later with the trend movement out of the range.

❖ If we find ourselves during the development of an upward trend movement (Phase E), we will favor the development of minor structures of accumulation to try to join the longs in favor of the

movement. We do not know the momentum with which the market may move and the imbalance in favor of this direction may have a certain urgency. This urgency can lead to the development of fast structures and that is where we want to be.

This is why we move down the time frame: to look for minor structures that fit within the context of the analysis of major structures. This is the dynamic that we have to keep in mind with respect to context analysis, where minor structures fit within major structures.

But be careful because the fact that we are initially biased towards one direction should not cause us not to be totally objective when analyzing that minor structure, because as we already know, we would be in key zone, liquidity zone and it is susceptible to cause the entry of large volume to the market. In other words:
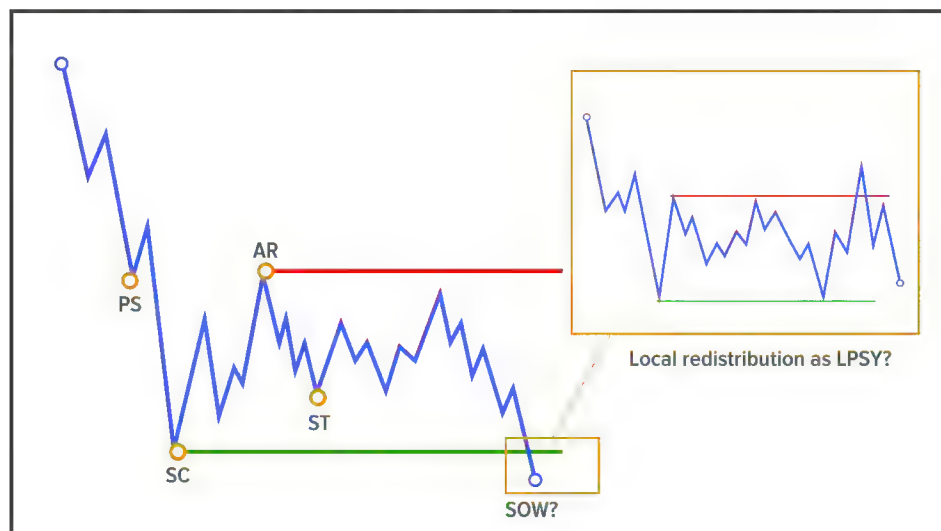
❖ The situation of potential Spring is also at the same time a situation of potential effective bearish breakout. The analysis of the major structure may suggest to us so far that the buyers are in control; but if during the development of this minor structure we do not observe these same indications, and on the contrary we see

the appearance of strong selling, it would not make sense to continue favoring the cumulative scheme and instead we should consider the bearish scenario.

❖ The situation of potential bullish breakout is also at the same time a situation of potential Upthrust. If at the moment, where we should favor the development of a minor cumulative scheme in function of BUEC of the major structure, the price generates a minor distribution structure, this would activate the short scenario and would leave such a minor distributive structure in function of Upthrust of the major one.

Hence the importance of being open-minded and not too rigid with respect to directional biases. In addition, it is always necessary to have both long and short scenarios prepared in order not to hesitate at the time of decision making.

If desired, it is possible to go further down in time for the analysis of structures. The key point is to favor the development of larger structures over smaller ones. With

this principle in mind, it is up to the discretion of each operator to decide how far to go down in temporality. Keep in mind that the lower you go, the more noise you will observe.

2.4.4 RISING TEMPORALITY. STRUCTURES FROM LOWEST TO HIGHEST.

Another very recurrent doubt is what type of structure to work with, how to decide to move from one structure to another.

It is a somewhat more complex doubt that already denotes certain knowledge of the methodology. After internalizing all the theoretical knowledge, the subconscious begins to reason and raise this type of interesting doubts; and this fact is tremendously significant as a sign that a good job is being done.

Unlike what happens in the analysis of the context where the development of the major structures is prioritized and the minor structures are fitted into them; when it comes to the first identification of a structure we will prioritize the development of the structures of lower time frames and then move on to higher time frames if the price tells us so.

When the market is developing the effect (trend movement) of a previous cause (cumulative/distributive range) we will be looking at lower time frames mainly for two reasons: to identify minor structures with which to join the movement; and to identify the stop of such a trend movement.

The first of these reasons has already been discussed in the previous section and is one of the situations for which we go down in temporality. This time it is a question of analyzing when to move up in temporality.

In this context of speed, minor structures may begin to develop and these could be the origin of the development of major events visible on higher time frames. For example; if the market is falling and we observe the development of a rapid accumulation pattern over a small time frame, the effect of this minor accumulation may be the generation of the Automatic Rally event visible over a higher time frame.
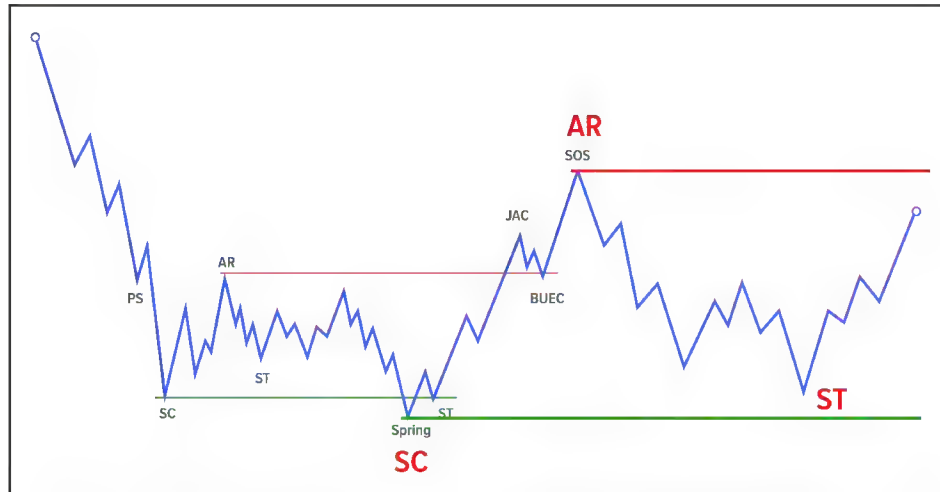
It may initially seem a bit confusing but it is not at all. I repeat the example in reverse: If the market is rising during the development of Phase E after an accumulation, we may observe a distributional pattern that will act as a Buying Climax event, and the effect of that distribution would act as an Automatic Reaction event of some higher time frame.
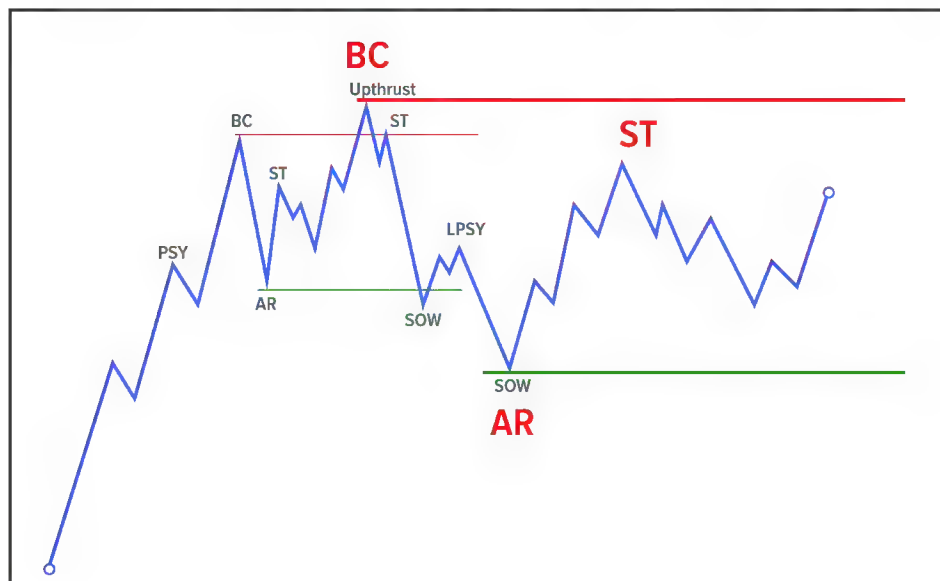
Obviously it is not necessary to go down the time frame for the identification of such events; everything will depend on the type of trading you decide to carry out. There are experienced traders who operate this type of minor counter trend structures but being aware that they must

be short term movements, according to the structure that has been developed.

It is only to exemplify under what condition it is reasonable to move up the time frame in order to be clear about the general analysis.

In this real example we see in confluence a failed accumulation structure rotating into a larger accumulation structure.

The concept has originally been explained as a minor structure that is fully developed and which in turn is part of a larger structure. In this example we see another way in which such a concept can appear on the market.

We see the unfolding of all the events of a minor cumulative structure and how at the moment of truth, in a position of potential BUEC, the market leaves a continuation failure to the upside. This is exactly where the trader may want to consider as more logical the possibility of observing all of that price action as a whole as if it were part of a larger structure. In this way, the Automatic Rally of the longer term will be determined from the low of the SC to the high of the UA of the smaller structure. Likewise the JAC will now be seen as a simple test denoting strength (UA) and from there the rest of the cumulative events will appear.

To highlight from the first moment the strength that existed in the background evidenced by the inability of the price to visit the bottom of both structures. Another interesting detail is to see that the major BUEC develops just above the High Volume Node, which also coincides with the VPOC of the entire structure.

2.5 WHAT TO DO WHEN THE CONTEXT IS NOT CLEAR?

We may open a chart and see absolutely nothing clear. Neither a clear trend movement, nor a sideways movement preceded by a pause. In this situation we have two options:

1. INCREASE THE TIME FRAME

As we know, the smaller the time frame, the more noise we see. It is very healthy on these types of occasions to move up in time frame to see the big picture of where we are.

What looks like chaos to you on intraday charts may make sense to you on higher time frames.

If you have done a good analysis from scratch as we suggested, you will have moved from higher time frames to lower time frames. So, simply stay at the time frame where you see the clearest price action and don't go any lower.

For example, if doing the context analysis you are well placed in H1, go down to M15 but you don't feel comfortable there, go back up to H1 and discard the possibility of analyzing lower charts.

2. CHANGE ASSETS

You may not be able to position yourself solidly on any time frame. At this point and taking into account the amount of tradable assets there are today, what need do we have to trade something that we don't really see clearly? It doesn't make sense.

Whether you trade stocks, indices, currencies, commodities or cryptocurrencies, the number of these tradable assets is large enough that you don't need to be forcing analysis, so if something is not clear to you, just move on to the next one.

2.5.1 THE CONTROLLER

This question also comes in handy to identify one of the biggest mistakes that some traders make when deciding to trade only one asset. This leads them to want to control every single price movement, which can be disastrous for the account. That word, control, may be one of the most damaging words in the world of trading. You can control absolutely nothing. Our focus should be on trading only the clearest setups with the best possible risk/reward ratio.

A very curious thing is that it often happens that the trader who trades only one asset trades on small time frames. It is the perfect combination for ruin. And as he will surely like the labels (for the fact of having controlled each movement), we have a trader who is leaving his eyes and mind trying to decipher each one of the movements and on top of that he practically does not see what the price is doing as he will have a 1 or 2 minutes chart full of labels.

Let's move away from this because it is impossible for anyone to hold on like this for long. The energy expenditure is brutal and the concentration required maintaining an optimal level of judgment is extremely high. Very few will actually be able to do this kind of trading. The vast majority are doomed to suffer from severe distress.

Let's move up the time frame and cover more assets. It is certainly good to specialize in one market (as each has its own peculiarities regarding best times, volatility etc.), but don't focus exclusively on one. Have a list of a few (even if they are 3 or 4) to follow and specialize in them if you want.

Lastly, we keep forgetting that a large part of market movements are random in nature; and this simply means that they do not have a directional intention behind them. As I discussed in the first pages of my first book, some of the ranges fluctuate up and down without any intentionality behind them, without constructing any kind of cause. It is pure randomness. They are those ranges where you see absolutely no clear footprint and you cannot make a judicious analysis of who might be in control of the market. You have to be aware of this.

PART 3. TODAY'S TRADING ECOSYSTEM

Although the following section is not directly related to the more technical focus of the Wyckoff methodology, it is important and enriching to understand the general context in which today's markets move.

The markets have undergone a paradigm shift and have migrated in just a few years from trades carried out entirely by people in person to fully electronic trades thanks to technological advances.

This has contributed to the emergence of new players in the investment world, new ways of operating and even new markets.

Undoubtedly, all this has led to a democratization of investment, allowing access to the retail trader, who not so many years ago was banned from participating. In this respect, it is no coincidence that most retail operators are losing out. The whole industry is set up so that their participation simply serves as another (very small) source of providing liquidity to the market.

It is important to keep your feet on the ground. The world of

trading and investing is far too complex for a retail trader at home, with an internet connection and a computer, to make any return on his capital. It has everything going against it, starting with the fact that it is a field dominated by large institutions which spend huge amounts of money on both developing powerful tools and hiring the most skilled people.

We will now take a very basic look at some of the lesser-known aspects of today's trading ecosystem that are of some relevance and could influence our trading.

3.1 TYPES OF FINANCIAL MARKET PARTICIPANTS

Understanding those who have the ability to influence price movements gives us a more robust viewpoint when making trading and investment decisions.

Financial markets are made up of a variety of players with different ways of operating based on their needs at that specific moment in time.

One of the biggest mistakes we can make is to think that all market movements are orchestrated by a single entity; or to distinguish between professional and non-professional traders. When these terms are used, as well as "strong hands" and "weak hands", they are used from the point of view of understanding who has more control of the market, not with the objective of seeing it as a war between institutional versus retail, because as we know, in the most traded assets, retailers have little or nothing to do with it.

It should be borne in mind that everything also depends on the volume traded in each particular asset. The higher the volume, the more intervention will come from large participants.

For example, one of the largest traded assets in the world, the

American S&P 500 index, is almost entirely controlled by large institutions, where 90% or more of the volume comes from them. It is a battle between them. No trade can be executed without one institution being willing to take one side of the position and another institution being willing to take the opposite side. The market will not be able to move the slightest tick if there is not an institution behind every move.

Conversely, assets that move very little volume can be influenced by less able traders. This is why it is generally not recommended to trade assets with low liquidity, in order to avoid possible manipulations.

Our objective therefore is to analyze the behavior of the chart to try to determine on which side most of the institutional money is.

We will categorize the different market participants according to their intention:

HEDGING

This is basically the execution of financial transactions aimed at nullifying or reducing risk. They consist of the purchase or sale of a product that is correlated with the asset on which the hedge is to be established.

While the main objective of hedging is to limit risk, it can also be used to secure a latent profit or to preserve the value of a fixed asset.

These traders do not care about the price direction as it is not the core business of their company. They do not trade with a directional intent and take a more long-term view.

Although there are different ways in which hedging can be carried out, the most traditional form of hedging is producer-oriented hedging:

An example would be an airline company that buys oil futures as a resource to balance its fuel costs.

Another example might be a large international importing and exporting company that purchases foreign exchange to hedge against possible price changes.

Market makers would also be included in this category as they could go to the market depending on their needs with the objective of keeping their total positions risk neutral.

SPECULATION

Unlike hedgers, who basically trade to reduce their exposure to risk, speculative traders take on risk when opening their positions.

If given the current market conditions they consider the price of the asset in question to be cheap they will buy and vice versa if they consider it to be expensive with the sole objective of profiting from the price movement.

Here we find hedge funds, funds, trading firms and in general any institution that operates directionally in the market to seek profitability.

They cover different timeframes and execute trades also through high frequency algorithms.

They are the most active traders in the financial market. Basically,

they focus on the search for liquidity zones since, due to the large amount of volume they move; they need this counterpart to match their orders.

There is a common misconception that all institutions are profitable. Many of these institutions are the preferred victims in the financial market as they move significant amounts of volume and possibly have an unsound trading approach.

Although not purely speculative in nature, some options traders could be included in this category because if they have a large open position in the options market, they are very likely to also turn to the futures market to try to defend it if necessary.

ARBITRAGE

It consists of taking advantage of financial market imperfections. These traders observe some inefficiency in prices and execute transactions with the aim of correcting it and adjusting prices.

There are different ways of arbitrage: either trading a single product, trading different correlated products, trading between different markets and even trading between contracts with the same and different expiration dates.

An example would be trading a de-correlation between two markets of the same asset, such as the spot market and the future. We can have for example the cross currency of the euro against the dollar (EURUSD) and the derivative in the futures market (6E). An arbitrage strategy will take advantage of the minuscule price difference that may exist between these

two markets to obtain an economic benefit.

Away from this we also have the Central Banks. They are the ones with the greatest capacity, since they direct the monetary policies of countries mainly by setting interest rates.

Of the types seen, the only one that would enter the market with the directional objective of adding pressure to one side or the other would be the speculative trader. The rest of the transactions would have different intentionality but would still ultimately be represented on price.

The fact that not all trading is speculative in nature is a very important factor to consider. Many make the mistake of thinking that every trade has directional interest behind it and in most cases this is not the case. There are many types of participants that interact in the market and the needs of each one are different.

In addition to the intentionality of the trade, it is worth highlighting the different uses of timeframes used by some traders and others. While some take into account the short term, others maintain medium or long term strategies. The key point is that each and every one of the market movements is being supported by a large institution and that at any time another one with a longer-term perspective and a greater capacity to influence the price may enter the market.

3.2 ELECTRONIC MARKETS

Since 2007, exchanges have gone from being controlled by humans to a fully automated and electronic environment where really all there are computers in charge of processing and matching orders.
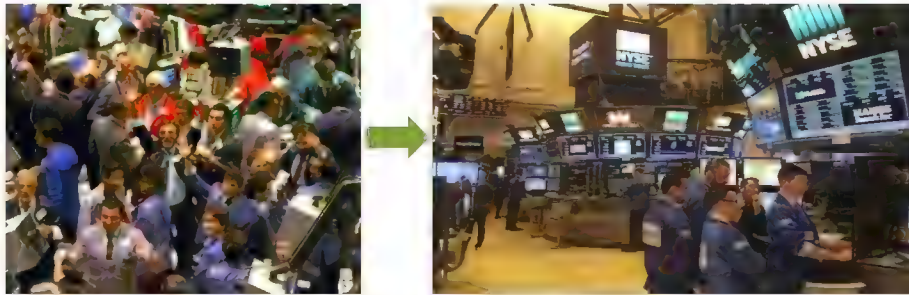
Source: SIFMA Insights. Electronic Trading Market Structure Primer

With the advent of new technologies, computer advances and regulatory changes in the financial world, the importance of speed in transmitting and receiving data has become increasingly important, reaching the current moment where electronic trading represents the majority of traded volume.

The most traded products such as futures, equities and index CDS show the highest degrees of electronification at 90%, 80% and 80% respectively. On the other hand, corporate bonds are at the lower end of the spectrum as they are more bespoke products, accounting for 40% and

25%.

BIS Global Assessment of Electronification

Source: SIFMA Insights. Electronic Trading Market Structure Primer
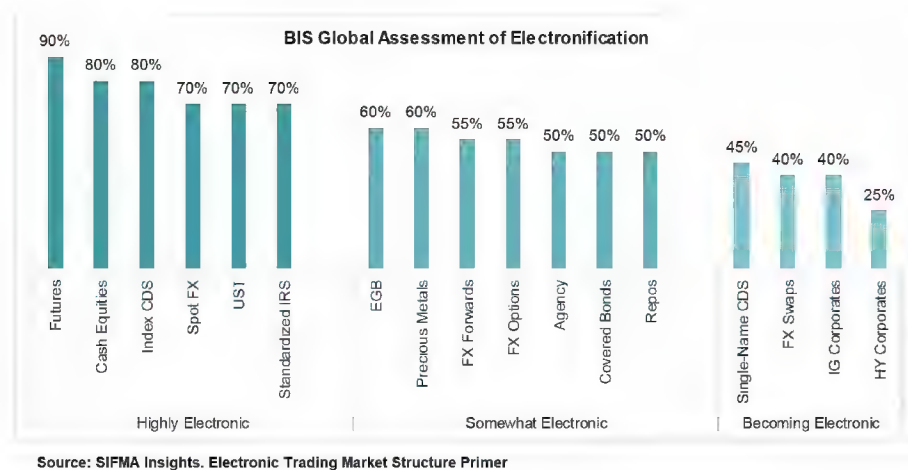
All these developments have improved market efficiency by adding liquidity, reducing costs, increasing speed of execution, improving risk management and enabling access to specific markets.

3.2.1 ALGORITHMIC TRADING

It is a process of executing orders based on well-defined and codified rules carried out by a computer automatically, thus avoiding human involvement.

It uses complex statistical and econometric models in advanced platforms to make decisions electronically and independently.

It mainly uses price, time and volume as variables; and was developed to take advantage of the speed and data processing advantages that computers have over human traders.

These strategies interpret market signals and implement trading strategies automatically based on them, with trades of varying lengths.

Exhibit 2: Market Share of Algorithmic Trading by Asset Class
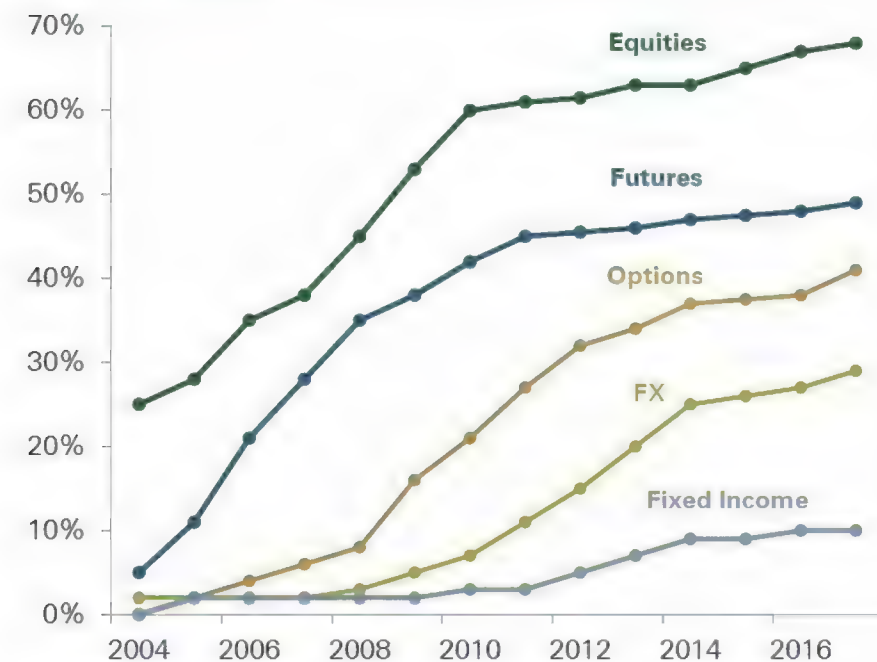
As of 2017.
Source: Goldman Sachs, AiteGroup

The increase in market share in recent years of algorithmic trading in all types of assets is simply spectacular, and forecasts for the following years follow the same dynamics.

One of the reasons for such growth is due to the emergence of artificial intelligence in the financial sector.

3.2.2 HIGH FREQUENCY TRADING

High Frequency Trading is a type of algorithmic trading but applied on the scale of microseconds trying to profit from very small changes in asset prices.

Source: SIFMA Insights. Electronic Trading Market Structure Primer

It is based on the use of mathematical algorithms with which orders are analyzed and executed according to market conditions. They perform thousands of trades in a short period of time, making money systematically and with a high probability.

Their main advantage is the speed of processing and execution, which they achieve thanks to the dedication of powerful computers. This is why the general public who operate from home simply does not have the means to access this type of trading. It is therefore a style reserved almost exclusively for institutional traders with large capital.

High-Frequency Trading: share of US equities trading volume

Although in Europe it is slightly lower, the share of the American equity market is still over 50% of the total volume traded. Interesting to note how the 2009 crisis caused a decline in HFT participation mainly due to increased competitiveness, high costs and low volatility.

Do not confuse High Frequency Trading with the automatic systems that can be created by a retail trader (which can fall into the category of algorithmic trading). Generally these types of tools (known as EAs, robots or bots) are not usually very effective; something very different from High Frequency Trading, which cost millions of dollars and have been developed by large financial firms to operate with significant amounts on a daily basis.

HOW DO HIGH FREQUENCY ALGORITHMS AFFECT US?

The fact that in today's markets most of the traded volume comes from high frequency algorithms does not greatly influence the structure-based analysis that we can do mainly because we are not competing to exploit the same anomalies.

While our analyses seek to take advantage of a deterministic side of the market where we try to elucidate who has more control (buyers or sellers), high frequency algorithms seem to be more in the random side of the market, mainly because of their categorization: arbitrage, directional (momentum and event-driven) and market making (liquidity ratio) strategies.

While it is true that some algorithms may execute directional strategies (with the objective of benefiting from price movements), these cover the shorter term and although they may distort our analysis, the advantage offered by the Wyckoff methodology is that it provides us with a structural framework thanks to which we can minimize some of the noise that originates on the smaller scales and obtain a more objective feeling of the current market conditions taking into account a larger context than that covered by these algorithms.

3.3 OVER THE COUNTER (OTC) MARKETS

This is a type of electronic market where financial assets are traded between two parties without the control and supervision of a regulator, as it is the case with stock exchanges and futures markets.

The main difference between centralized markets (On-Exchange) and non-centralized markets (Off-Exchange) is that in centralized markets there is a single order book which is responsible for linking all the participants in that market; whereas in non-centralized markets there are multiple order books (as many as there are market makers) where the lack of transparency with respect to market depth is evident by only showing the price of the BID and the ASK.

In recent years the US market has undergone a process of fragmentation where more and more decentralized markets have been created. Currently, U.S. equity liquidity is divided among about 88 different sources, with almost 40% of trading taking place in non-centralized markets.

Total Market Equity Share
Total volume based on October-November 2018

Source: Nasdaq. Total Markets - A
blueprint for a better tomorrow
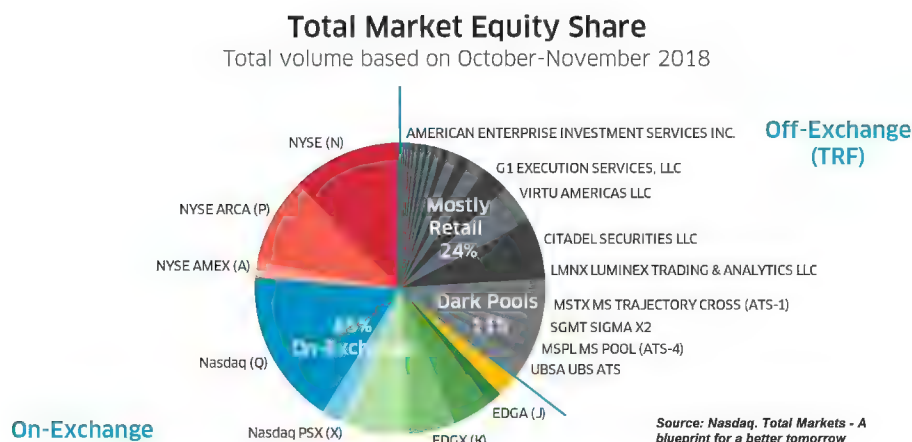
Within the non-centralized markets we find different brokers based on their treatment of client orders. On the one hand, there are those who have a Dealing Desk (known as Market Makers) and, on the other hand, those who do not have a Dealing Desk (Non Dealing Desk), who act as intermediaries between the client and the rest of the market.

This second type, non-dealing desk brokers, is the one with whom it is recommended to work. The reason is because Market Makers are in charge of offering the final price of the asset, making the process less transparent.

Having the ability to take the counterpart in the trades of their clients opens the door to possible conflicts of interest, because if the client wins the broker loses and vice versa. And obviously the broker will do everything possible to keep his business profitable.

When the fact that the owner of the market is in charge of offering the final price together with the possibility that he is at the same time the counterparty, one of the main dangers for the retail trader appears and that is that he is exposed to suffer some kind of manipulation in the price movements.

It is also important to know that, due to the very nature of this type

of non-centralized markets, there may be different prices for the same asset. In other words, if we want to trade the EUR/USD currency cross, each market maker will offer us a different price and volume.

How do OTC markets affect us?

The problem we encounter here is that the analysis we do under this type of market will be based on data that, although it could be a meaningful and valid representation of the whole market, in reality it does not genuinely represent all the price and volume data.

In order to reliably have this data we will need to analyze the asset under a centralized market. Continuing with the EUR/USD example, we should analyze the futures market (centralized market) which corresponds to the ticker $6E.

Therefore, if we do not have the economic capacity (sufficient capital) to operate this futures market, we can analyze the asset in this futures market and execute the trading through another more affordable financial derivative such as the CFD (Contract For Different) with a good broker (which is not a market maker). An intermediate option would be to trade the small version of the future, the micro future, which in the case of EUR/USD corresponds to the ticker $M6E.

If we open a chart of the future (6E) and the CFD (EURUSD) we will see that the price movements are practically the same even though they are different markets. This is possible thanks to an arbitrage process carried out by high-frequency algorithms that occurs systematically between both markets.

3.4 DARK POOLS

A Dark Pool is a private market (Off-Exchange) that puts institutional investors in contact and facilitates the exchange of financial assets with the peculiarity that its transactions are not reported immediately, the amount traded (the volume) not being known until 24 hours later.
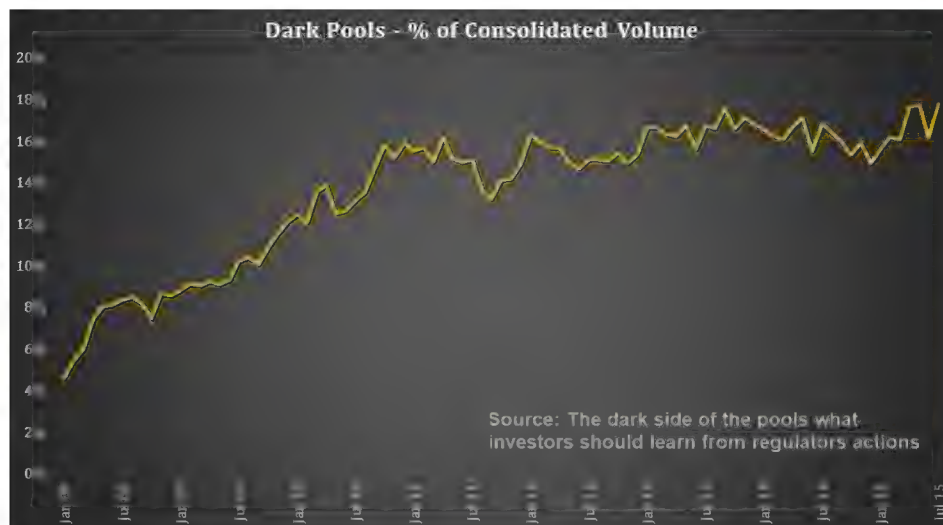
Trading in non-centralized stock markets in the U.S. is approximately 35%, with Dark Pools accounting for 16 to 18%. And according to a Bloomberg study, overall Dark Pools trading already accounts for over 30% of total trading volume.

Legend:
- BLINK_MTF
- BXE_Book
- CXE_Book
- ITG_Posit
- Instinet_Blockmatch
- Liquidnet
- Nomura_NX
- SIGMA_X_MTF
- SLS
- Smartpool
- Turquoise
- UBS_MTF
- Nordic @ Mid
- other

Source: Dark pools in European equity markets: emergence, competition and implications
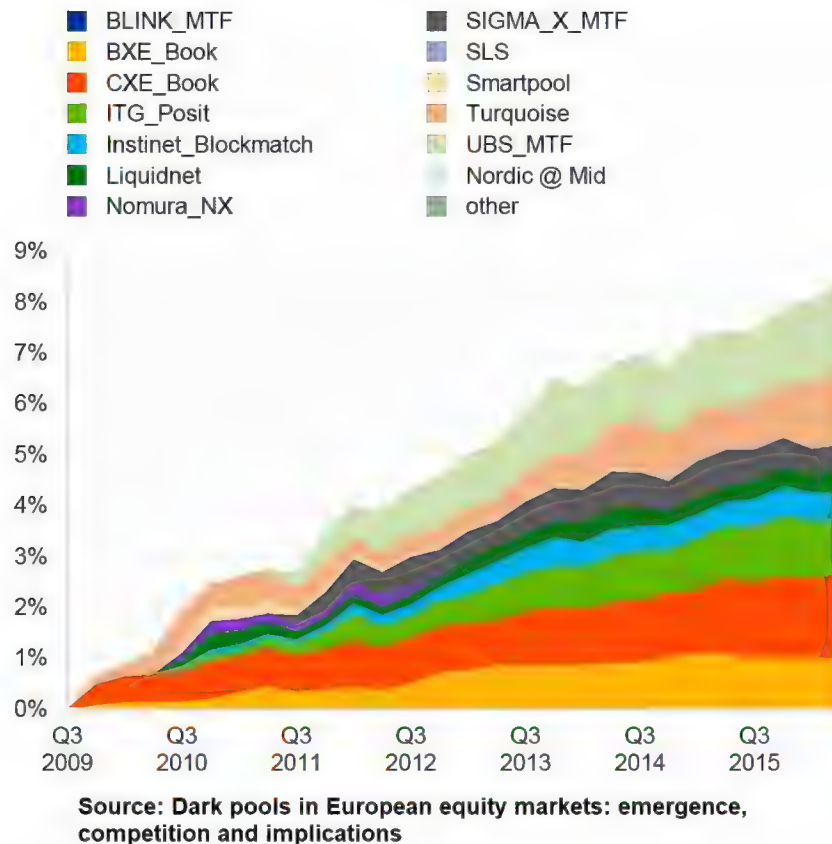
Dark Pools' market share of European equity trading has expanded rapidly in recent years, growing from 1% in 2009 to 8% in 2016.

When a large institution wants to buy or sell a huge amount of an asset they go to this type of market mainly because they know that if they access the public market they will find it difficult to find a counterparty, that they will possibly get a worse price in addition to being exposed to predatory techniques such as Front Running executed by high frequency algorithms. In this type of markets they avoid this negative impact and at the same time they get better commissions since they save the fees required by the public markets.

Contrary to what many people may think, Dark Pools are highly regulated as their owners are registered with the SEC (Securities and Exchange Commission) and FINRA (The Financial Industry Regulatory

Authority) and are therefore subject to regular audits and examinations similar to those of a public market.

In addition to private financial institutions, there are public exchanges that have their own Dark Pools such as the New York Stock Exchange (NYSE), the most traded and liquid exchange in the world.

The CME (Chicago Mercantile Exchange), which is the market with the largest number of options and futures contracts in the world, also has its own Dark Pool and offers this opaque trading service through what they have called "Block Trades". On their own website they explain in detail the information in this regard, to highlight:

"A Block Trade is a privately traded futures, options or combinations transaction that is allowed to be executed apart from the public auction market. Participation in Block Trades is restricted to participants in eligible contracts, as that term is defined in the Commodity Exchange Act.

Rule 526 ("Block Trades") governs Block Trades trading on the CME, CBOT, NYMEX and COMEX products. Block Trades are permitted in specific products and are subject to minimum transaction size requirements that vary by product, transaction type and execution time. Block Trades may be executed at any time at a fair and reasonable price".

How do Dark Pools affect us?

The activity conducted in Dark Pools have an important role in determining intraday returns and the uncertainty that can be related to

them, thus having important microstructural implications.

It turns out that we may be analyzing an asset in which very significant transactions may have taken place in a hidden manner and we obviously cannot even assess the buyer's intentions.

These transactions, not being determined by the supply and demand of the public market, do not have an immediate impact on the price formation; but there are studies that affirm that the operators of the public markets react to the report of orders executed in the Dark Pool once it is released, being able to significantly alter the analysis of the interaction up to that moment.

3.5 ARE MARKETS RANDOM OR DETERMINISTIC?

This issue is another of the great debates within the trading community and undoubtedly generates great controversy. The vast majority of those who position themselves in favor of the randomness of the market do so with the aim of discrediting the usefulness of technical analysis. On the other hand, we have those who observe each and every price movement and give it an intention, a big mistake. Not everything is black and white.

Randomness is based on the premise of market efficiency while determinism (non-randomness) is based on market inefficiency.

The random markets approach suggests that the current price already reflects all the information about past events and even the events that the market expects to take place in the future. In other words, all the information about the asset is absolutely discounted and therefore it is not possible to predict the future price action. The reasoning is that, when participants try to take advantage of new information, together they neutralize this advantage. This would lead to the conclusion that it is not possible to take advantage of the market's own interpretation, unless the trader has access to privileged information.

The deterministic market approach suggests that price movements are influenced by external factors so that by knowing what these factors are, it is possible to predict future price action and therefore, it is possible to profit from the market's interpretation.

Randomness refers to the fact that this market movement has no logical intention behind it; it is simply a price fluctuation. Randomness arises as a result of the innumerable variables that take place in the market. No one can know how the other market participants are going to act. If anyone did, they would have a deterministic system whose predictions would be right every time.

On the other hand, if the Efficient Markets Hypothesis (EMH) and the randomness of the market were valid, no one could make profits on a recurring basis. And it has been proven throughout history that this is not the case. We all know great traders in the financial markets who have managed to win with different approaches (technical, fundamental and quantitative). In addition to this fact, the hypothesis of efficient markets has come in for a lot of criticism mainly because it assumes rational behavior of agents in their decision making.

On the other hand, financial markets cannot be modeled as a totally deterministic process where there is no randomness, since this would mean that there would be strategies with a 100% probability of success, and this (as far as we know) is not the case either.

3.5.1 THE ADAPTIVE MARKETS HYPOTHESIS

We therefore conclude that financial markets are composed of a percentage of randomness and another percentage of determinism, without knowing how much weight each has.

This theory would be supported by the Adaptive Markets Hypothesis (AMH) which shows the efficiency of financial markets not as a present or absent characteristic, but as a quality that varies according to the market conditions (the environment, context), which are determined by the interactions between its agents.

This hypothesis has been presented by the American financial economist Andrew W. Lo in his book Adaptive Markets published in 2017 and is mainly supported by:

1. **The efficiency of the market depends on its conditions**. This changing characteristic is the result of participants' interactions which in turn depend on market conditions.

2. **The agent is not totally rational and is subject to cognitive biases**. A purely rational model cannot be applied since participants form expectations based on different factors. Moreover, different expectations can be created with the same information, not to mention the fact that each agent has different degrees of risk aversion.

Although the author refers to agents as personal individuals, this is equally applicable to the current trading ecosystem where we have already mentioned that practically all actions are made electronically by algorithms. This fact does not modify the basis of the adaptive hypothesis since, regardless of the market participant and the way in which he interacts with the rest of the market, he will make his decisions based on the valuations, motives or needs that he has at a given moment; and that

given moment will be conditioned by different factors; factors that will change over time and thus change the valuations, motives or needs of the participants.

The HMA does not focus on discrediting the Efficient Markets Hypothesis, it simply treats it as incomplete. It places more value on changing market conditions (due to the arrival of new information) and how participants may react to them. It focuses on the fact that rationality and irrationality (efficiency and inefficiency) can coexist at the same time in the market depending on the conditions.

3.5.2 WHERE DOES THE WYCKOFF METHODOLOGY FIT IN?

Landing it on what concerns us, the reading of the market under the principles of the Wyckoff methodology is based on a deterministic market event: the law of Cause and Effect and for the market to develop an effect (trend) there must first be a cause (accumulation/distribution). There are other deterministic events that can offer an advantage, such as seasonality.

An example of random behavior could be seen in High Frequency Algorithms. We have already discussed some of their uses and they are the perfect example of forces that have the ability to move the market and that do not necessarily have a directional logic behind them.

Finally, most studies that defend the randomness of the market use classic chartist patterns such as triangles, shoulder head shoulder, flags

etc. or some price pattern without an underlying logic behind it to confirm the lack of predictability of technical analysis in general. Our approach to trading the markets is far removed from all this.

There are studies where using an analytical tool as simple as trend lines has shown a non-random behavior in financial markets being able to even exploit an anomaly with which to obtain certain returns.

PART 4. THE IMPORTANCE OF VOLUME

As we have seen, in the context in which we currently find ourselves, volume has become even more significant than in past decades. There is more and more money moving through all the financial markets and this has caused certain changes; from the way of trading to the appearance of new tools.

At the beginning of the 20th century, the markets, operated entirely manually, were guided mainly by the cognitive biases of their participants. Emotions such as fear and greed were present and caused a large part of the decisions made by their participants. This irrationality of the individual led to very profitable situations for the well-informed traders of the time.

Average Daily Trading Volume

$5.00 Trillion — Forex Market

$22.4 billion — New York Stock Exchange

$18.9 billion — Tokyo Stock Exchange

$7.2 billion — London Stock Exchange

As everyone knows by now, the current ecosystem is that the vast majority of traded volume is done electronically, that huge amounts of volume are moved on a daily basis and that in order for all these orders to be filled, it is necessary to highlight the concepts of counterparty, liquidity and order matching; in short, the importance of volume.

In this section we will study auction theory in depth and look at some tools that will allow us to make a more accurate analysis of volume data.

4.1 AUCTION MARKET THEORY

Auction theory, as it is known in English, was born mainly from the studies by J.P. Steidlmayer on the Market Profile. Subsequently, together with other authors such as James Dalton and Donald L. Jones, he defined a series of concepts that constitute this theory.

It is based on the fact that the market, with the priority objective of **facilitating negotiation** among its participants and under the principles of the law of supply and demand, will always move in search of efficiency, also known as equilibrium or fair value.

Efficiency means that buyers and sellers are comfortable negotiating and neither has clear control. That comfort comes because, based on current market conditions, the valuations of both are very similar. The way this equilibrium is visually observed on a price chart is with a continuous rotation (price ranges). This price lateralization represents this equilibrium. It is evidence of the facilitation of trading and is the state in which the market is always looking to be.

On the other hand, we have the moments of **inefficiency** or imbalance and these are represented in the trend movements. When new information reaches the market, it can cause the value perceived by both

buyers and sellers of the asset to change, generating a disagreement between them. One of the two will take control and move the price away from the previous equilibrium zone, offering a profitable trading opportunity. What is evident in this context is that the market is not facilitating trading and is therefore considered an inefficient condition.
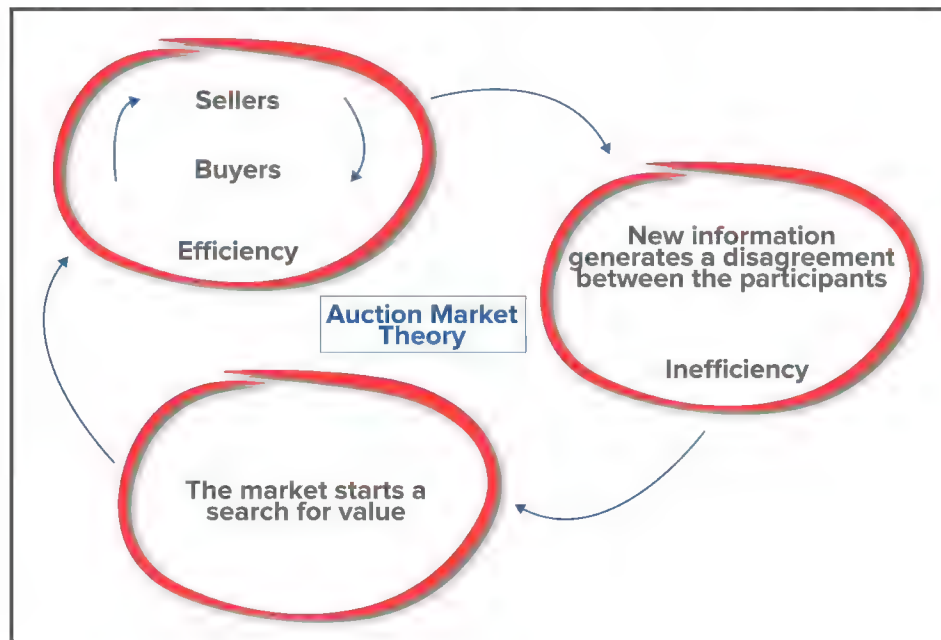
The market will be constantly moving in search and confirmation of value; in situations where buyers and sellers are in a position to exchange stock. When this happens it is because the valuations that these participants have on the price are very similar. At that moment the negotiation will again generate a new equilibrium zone. This cycle will repeat itself over and over again in an uninterrupted manner.

The general idea is that the market will move from one **equilibrium** area to another through trend movements and that these will be initiated when the market sentiment of both buyers and sellers about the current value differs causing the **imbalance**. The market will now begin the search for the next area that generates consensus among the majority of participants about the security.

It should be noted that the market spends most of its time during periods of equilibrium, which is logical due to the nature of the market based on favoring negotiation among its participants. This is where the accumulation and distribution processes take place, which as we all know is where the Wyckoff methodology focuses.

4.1.1 VARIABLES

The auction process in the financial markets is fundamentally based on value. In order to try to decipher where such value is found, three additional elements need to be evaluated:

PRICE

In the auction mechanism price is used as a discovery tool. The facilitation of trading is carried out by price movement, which fluctuates up and down exploring different levels with the objective of seeing how participants react to such exploration.

These price movements herald opportunities. If the participants respond to this exploration by observing the price as fair, it will provoke negotiation between them. Conversely, if these discoveries of new price levels are not perceived as attractive to both participants, it will lead to rejection.

TIME

When the market promotes an opportunity (reaches an attractive level), it will use time to regulate the duration that the opportunity will be available.

The price will spend very little time in those zones that are advantageous to one of the two sides (buyers or sellers).

A zone of efficiency or equilibrium will be characterized by a higher consumption of time; while a zone of inefficiency or imbalance will be represented by a short consumption of time.

VOLUME

Volume represents the activity, the amount of an asset that has been exchanged. This quantity suggests the interest or disinterest at certain levels.

Based on volume there are areas that are more valuable than others. The basic rule is that the more activity a certain area sees, the higher the value assigned to it by market participants.

Price + Time + Volume = Value

These three elements are responsible for giving us a logical perspective on, based on current conditions, where market participants consider the value of a particular asset to be.

Through price the market discovers new levels, time consumption suggests that there is some acceptance in that new area and finally volume generation confirms that participants have created a new value zone where they trade comfortably.

As we know, conditions are changeable and therefore continuous re-evaluation of these elements is needed. Knowing where the value is a key as it defines the market condition and based on this we will be able to put forward different trading ideas.

4.1.2 PERCEPTION OF VALUE

The market is constantly rotating between two phases: horizontal development (equilibrium) or vertical development (imbalance). Horizontal development suggests agreement among participants while vertical development is a market in search of value, in search of participants to negotiate with.

The fact that the price is moving comfortably in a trading range (horizontal development) represents acceptance in that zone, it is a context where price and value coincide according to the participants. When the market is in a trending state (vertical development) price and value do not coincide; in this context price will move ahead and value will follow or not (as a sign of acceptance and rejection).
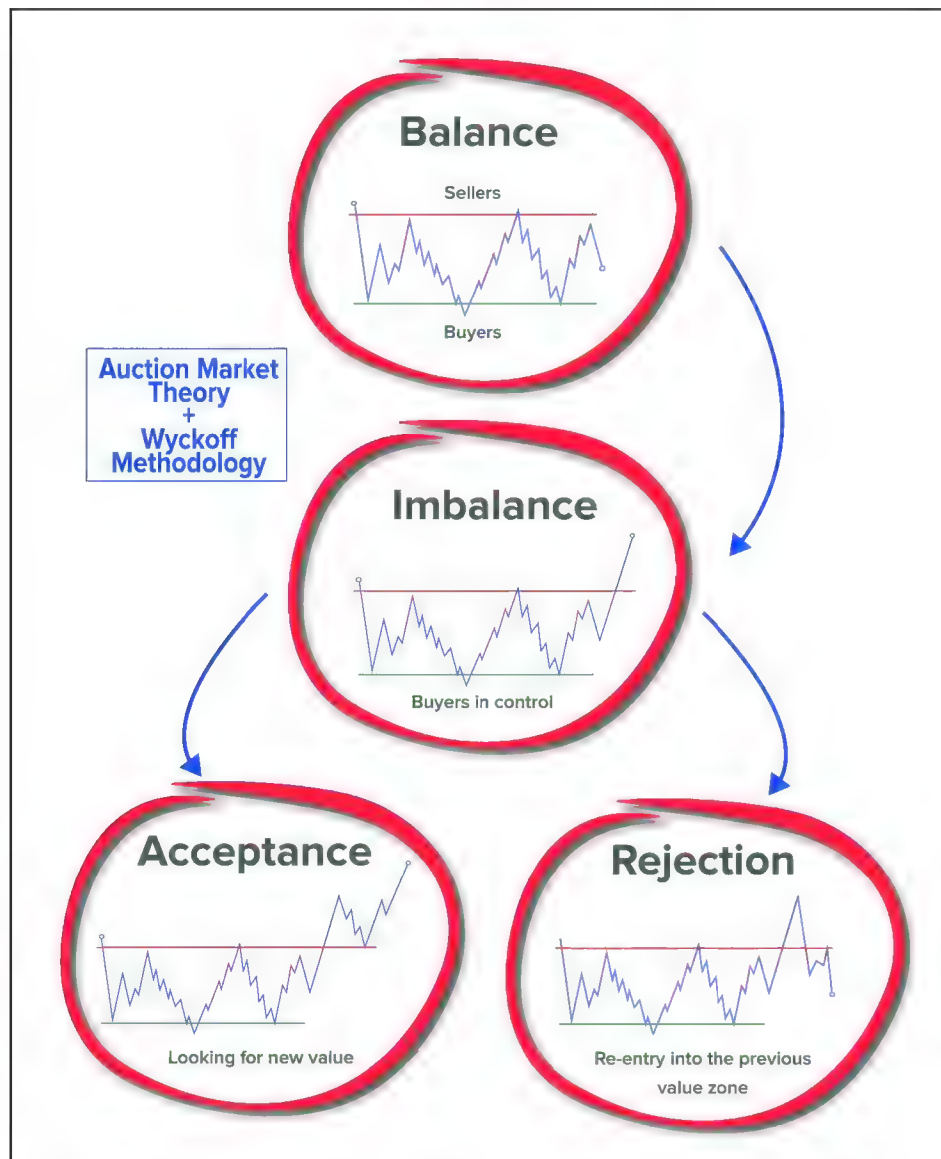
In an equilibrium area the fairest price will be located in the middle and the extremes both above and below will represent levels that are unfair or not accepted by the participants.

Since the fairest value is located in the middle of the range, a move to the upper end will be seen by buyers as an expensive price and at the same time sellers will consider it cheap, so their actions will lead to send the price back to the fairest zone. Similarly a visit to the lower end of the range will be seen as cheap by buyers and expensive by sellers, leading to

a further turn to the upside.

It is nothing more or less than the typical range trading that we all know where you look to buy at lows and sell at highs hoping that the price will continue to reject those extremes. And normally the market will continue to do so until its condition changes.

The interesting thing comes when an imbalance occurs and the price leaves the value zone.

What will happen then? When the price leaves a trading zone a change in the perception of value can happen.

The trader's task is now to assess whether these new price quote levels are accepted or rejected. Price is ahead of the other two variables in determining potential areas of value, but it is time in the first instance and volume in the last instance that will confirm whether that new area is accepted or rejected.

We interpret acceptance to a new area when the price manages to hold (time consuming) and contracts begin to be exchanged between buyers and sellers (volume), all this represented as a certain lateralization of the price. Conversely, we would identify rejection when the price quickly reverts back to its old value area denoting lack of interest and evidenced by a sharp turn.

All horizontal developments end when there is no longer agreement among the participants about the value; while all vertical developments end when the price reaches a zone where there is agreement among them again. This is the continuous cycle of the market. This idea in itself is very powerful and with the right approach trading strategies could be built around it.

As with one of the universal principles of technical analysis (price discounts everything), we do not need to go into what actually produces this change in the participants' perception of value. We know that based on the current conditions, based on the information available at that precise moment, all participants give a valuation to the price of the asset. Subsequently, something may happen at a fundamental level that changes this perception, but the beauty of this approach is that it removes us from the need to know and interpret what has happened to change the participants' perception.

It is important to emphasize that this auction theory is universal and can therefore be used to evaluate any type of financial market, regardless of the time frame used.

4.1.3 THE FOUR STEPS OF MARKET ACTIVITY

This is a process with which Steidlmayer represented the different phases through which the market passes during the development of its movements.

The four phases are:

1. **Trend phase.** Vertical development, price in imbalance in favor of one direction.

2. **Stopping phase**. Traders begin to appear in the opposite direction and the stop of the previous trend movement occurs.

The limits of the upper and lower range are established.

3. **Lateralization phase**. Horizontal development. Trading around the stop price and within the limits of the new equilibrium range.

4. **Transition phase**. The price leaves the range and a new imbalance begins in search of value. This movement may be a reversal or a continuation of the previous trend movement.
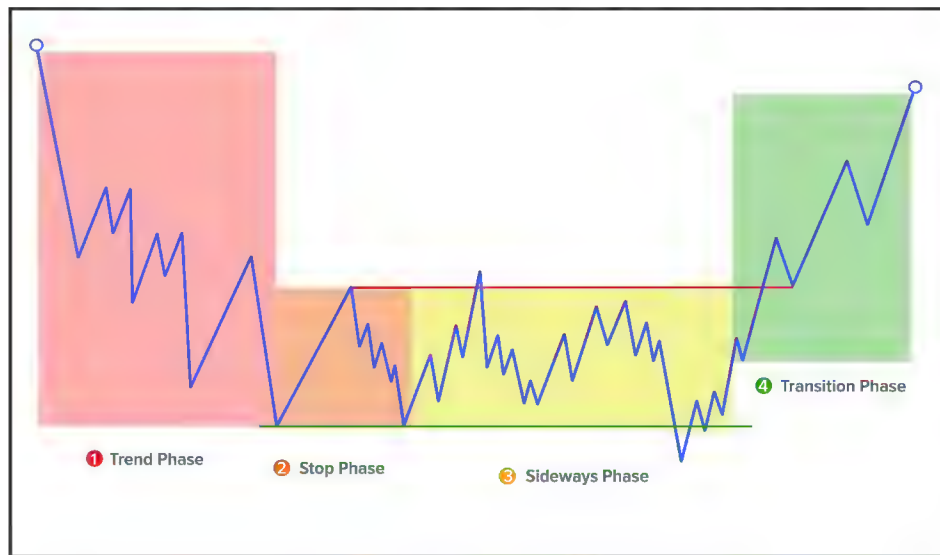
Once the transition phase is over, the market is in a position to start a new cycle. This protocol will run uninterrupted and is observable in all time frames.

Visually up to step three a P or b-shaped profile would be observed. The formation of this type of profile as well as the proposal of a type of operative based on it will be seen in more depth later.

Structural traders will be familiar with this four-step protocol because it is essentially exactly the development from Phase A to Phase E proposed by the Wyckoff methodology:

1. **Stop the previous trend**

2. Build the cause

3. Assess the opposition

4. Initiate the trend movement

5. Confirm directionality
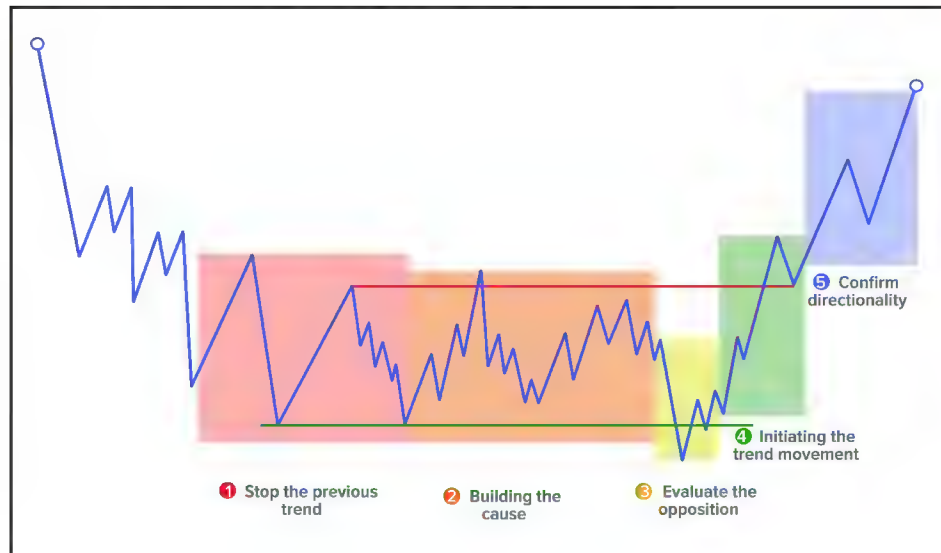
Although Richard Wyckoff, as well as his later students and other traders who have contributed to the dissemination of his ideas were based solely on analytical tools and principles of technical analysis, we see that they already implicitly worked these concepts proposed in the auction theory even if they did not use such terms.

That is why it is considered the only technical analysis approach based on a real underlying logic: auction theory and the law of supply and demand.

4.2 THE LAW OF SUPPLY AND DEMAND

This is the basic law on which the auction theory is based and therefore governs all price changes. Initially the studies that Richard Wyckoff proposed on this law told us that:

- ❖ If demand was greater than supply, the price of the product would rise.

- ❖ If supply was greater than demand, the price of the product would go down.

- ❖ If supply and demand were in equilibrium, the price of the product would remain the same.

4.2.1 COMMON ERRORS OF INTERPRETATION

This idea is very general and should be qualified since a series of conceptual errors have been generated around this law of supply and

demand.

Error No. 1: Prices rise because there are more buyers than sellers or fall because there are more sellers than buyers.

In the market there are always the same number of buyers and sellers; since for someone to buy, there must be someone to sell to him. No matter how much someone wants to buy, as long as there is no seller willing to offer the counterpart, it is impossible for the negotiation to take place.

The key lies in the attitude (aggressive or passive) that traders take when participating in the market.

Error No. 2: Prices go up because there is more demand than supply or they go down because there is more supply than demand.

The problem with this statement is to call demand everything that has to do with buying and supply everything that has to do with selling. In reality they are different concepts and it is convenient to separate them when referring to one or the other.

Supply and Demand are the limit orders that both buyers and sellers place in the BID and ASK columns pending execution, which is known as liquidity.

4.2.2 BID/ASK, SPREAD AND LIQUIDITY

There is no single price in financial markets. This is obvious but not understood by many people. When a participant goes to the market, he finds two prices: the buying and the selling price.

BID. The BID column is the part of the order book where buyers come to place their bid (limit buy orders) and where sellers come to match their ask orders. The highest price level within the BID column is known as the Best BID and represents the best price at which to sell.

ASK. The ASK column is the part of the order book where sellers go to place their pending sell (bid) orders and where buyers go to find the counterpart for their purchases. The lowest price level within the ASK column is known as the Best ASK and represents the best price at which to buy.

Therefore, it is the order execution mechanism that determines the price. The difference between the BID and the ASK is called the **Spread** and is an indicator to be taken into account to assess the liquidity of the

asset. The lower the Spread, the more liquid it is.

Liquidity is an extremely important concept. It is the amount of volume that an asset trades. We should try to trade assets the more liquid the better, as this will mean that it will be more difficult for a large individual trader to have the ability to move the price. It is therefore a measure to avoid possible manipulation. If you are trading an asset that trades very little volume, it is likely that if a large institution enters, it can move the price with relative ease. These environments should be avoided.

4.2.3 TYPES OF PARTICIPANTS BASED ON THEIR BEHAVIOR

The key element that clarifies the errors in the interpretation of the Law of Supply and Demand is the behavior of traders, since they can participate in the market in different ways:

❖ **Aggressive**. Liquidity takers through the use of "at market" orders. They have urgency to enter and attack the Best BID and Best ASK where the limit orders remain located. This type of aggressive orders is the real engine of the market since they are the ones that initiate the transactions.

❖ **Passive**. Liquidity creators through the use of "limit" orders. Sellers create supply by leaving their orders pending execution in the ASK column; and buyers create demand by leaving their orders placed in the BID column.

BID	PRICE	ASK
	108	600
	107	980
	106	900
	105	720
	104	550
	103	500
	102	120
	101	90
	100	75
50	99	
66	98	
95	97	
130	96	
249	95	
120	94	
97	93	
90	92	

Passive Seller — Provides liquidity in the ASK

Agressive Seller — Takes liquidity from the BID

Agressive Buyer — Takes liquidity from the ASK

Passive Buyer — Provides liquidity in the BID

4.2.4 HOW DOES PRICE MOVEMENT OCCUR?

We come then to the moment of examining what must happen for the price to move. The idea here is clear: it takes the aggressive participation of traders to produce a change in price. Passive orders represent intent in the first instance, and if executed they have the ability to stop a move, but not the ability to make the price move. This requires initiative.

INITIATIVE

For the price to move upwards, buyers have to buy all the sell (bid) orders that are available at that price level and also continue to buy aggressively to force the price up one level to find new sellers to trade with.

Passive buy orders cause the downward movement to slow down, but by themselves cannot drive the price up. The only orders that have the ability to move the price upwards are buy-to-market orders or those whose crossing orders become buy-to-market orders (such as stop losses on short positions).

BID	PRICE	ASK
	108	600
	107	980
	106	900
	105	720
	104	550
	103	500
	102	120
	101	90
	100	75
50	99	
66	98	
95	97	
130	96	
249	95	
120	94	
97	93	
90	92	

For the price to move down one level sellers must consume those 50 limit orders

For the price to move up one level buyers must consume those 75 limit orders

For the price to move downward, sellers have to acquire all the buy (demand) orders that are available at that price level and continue to push downward forcing the price to go in search of buyers at lower levels.

Passive sell orders cause the upward movement to slow down, but do not have the ability to drive the price down on their own. The only

orders that have the ability to move the price downward are market sells or those whose crossing orders become market sells (Stop Loss of long positions).

EXHAUSTION

The price needs aggressiveness to move, but it is very interesting to take into account also that the lack of interest from the opposite side can facilitate this task.

An absence of supply can facilitate the price rise just as an absence of demand can facilitate its fall.

BID	PRICE	ASK
	108	134
	107	100
	106	180
	105	120
	104	44
	103	26
	102	15
	101	7
	100	5
50	99	
66	98	
95	97	
130	96	
249	95	
120	94	
97	93	
90	92	

Large imbalance between buy and sell limit orders = Lack of selling interest

As supply withdraws, this lack of interest will be represented as fewer contracts placed in the ASK column and therefore the price can more easily move upward with very little buying power.

Conversely, if it is demand that withdraws, it will be visualized with a reduction in the contracts that buyers have placed in the BID and this will cause the price to be able to move lower with very little selling initiative.

4.2.5 HOW DO MARKET TURNS OCCUR?

Keep in mind that the market, in order to facilitate trading, will go up in search of sellers and down in search of buyers; in other words, it will always move towards the equilibrium point where supply and demand will be equalized.
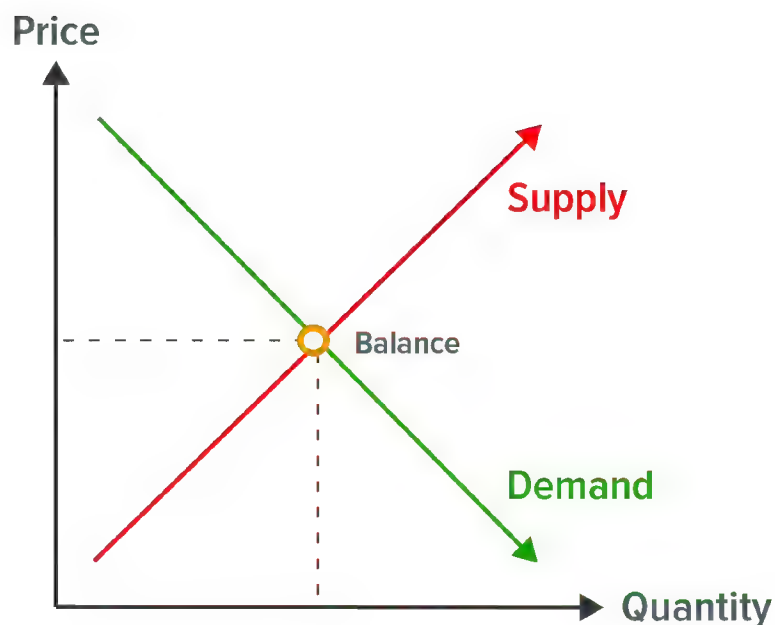
Moreover, logic leads us to think that as the price rises, the interest of buyers decreases (they see the price as increasingly more expensive) and the interest of sellers increases (they see the price as increasingly cheaper); and as the price falls, the interest of sellers decreases and that of buyers increases.

In a rising market, as long as the buying initiative is able to consume all the liquidity (supply) found at higher levels, the price will continue to rise. On the other hand, in bear markets, as long as the selling initiative is able to consume all the liquidity (demand) found at lower levels, the price will continue to fall.

At the moment of a market turn, we will normally always have a three-step process:

1. **Exhaustion**

2. **Absorption**

3. **Initiative**
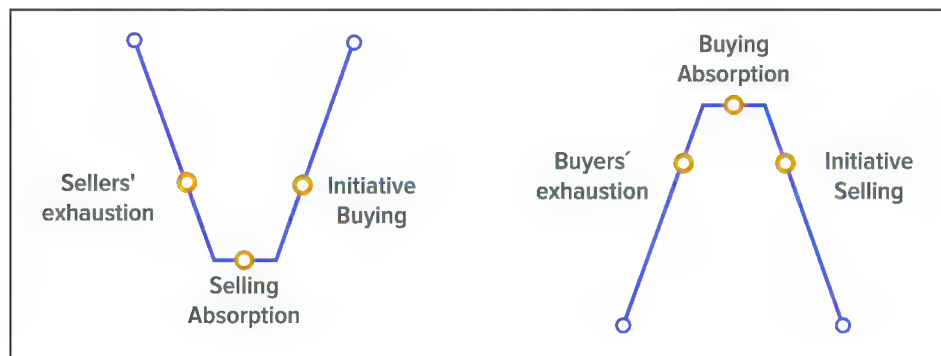
To reverse an upward movement, the lack of interest (exhaustion) of the buyers to continue buying, the first entry of sale by the big operators in a passive way (absorption) and the aggressiveness (initiative) of the sellers will be combined.

Oppositely for the bullish turn example: sellers' exhaustion, passive positioning through absorption of sales and buying initiative with aggression in the ASK.

In essence this three-step protocol is nothing more than accumulation and distribution processes regardless of the time scale on which they take place.

4.3 ORDER TYPES

When participating in the market we can do so mainly by using four different types of orders.

❖ **Market**. Aggressive order that is executed at the best available buy and sell price (Best BID/ASK). Immediate execution that guarantees the entry to the market but not the specific price at which it has been entered due to the constant change in the quotation and the application of the Spread.

❖ **Limit**. Passive order that is executed at a specific price. Entry at that specific price is guaranteed but execution is not guaranteed.

That is, the price may never visit that level and therefore we would not enter the market. As long as they are not executed, they can be removed at any time.

❖ **Stop**. A passive order that is executed at a specific price. When the price reaches it, it becomes a market order and is therefore executed at the best available price (Best BID/ASK).

❖ **Stop-Limit**. Combines the features of Limit and Stop orders. Once a certain price level is reached (Stop orders function), an order is generated at a specific level (Limit orders function). Operationally, it works exactly the same as Limit orders.

Based on the four types of orders we have just seen, the following is the full spectrum of basic orders available depending on the intention and what it is used for:

❖ **Buy Market**. Aggressive order at the current price. It is used to:

- Enter the market on buy.

- Close a sell position (either at a profit or loss).

❖ **Buy Stop**. Pending order above the current price. It is used to:

- Enter the market on buy.

- Close a sell position (by Stop Loss).

❖ **Buy Limit**. Pending order below the current price. It is used for:

- Enter the market on buy.

- Close a sell position (by Take Profit).

❖ **Buy Stop Limit**. Pending order below the price after reaching a

level. It is used to:

- Enter the market to buy.

- Close a sell position (by Take Profit).

❖ **Sell Market**. Aggressive order at the current price. It is used to:

- Enter the market on sell.

- Close a buy position (either in profit or loss).

❖ **Sell Stop**. Pending order below the current price. It is used to:

- Enter the market on sell.

- Close a buy position (by Stop Loss).

❖ **Sell Limit**. Pending order above the current price. It is used to:

- Enter the market on sell.

- Close a buy position (by Take Profit).

❖ **Sell Stop Limit**. Pending order above the price after reaching a level. It is used to:

- Enter the market to sell.

- Close a buy position (by Take Profit).

4.3.1 ADVANCED FEATURES

There are certain advanced instructions that can be applied, depending on the broker, to orders to enter and exit the market:

One-Cancels-Other (OCO). Entering two orders to the market with one of them being cancelled when the other is executed.

Order-Sends-Order (OSO). Instruction to execute secondary orders when the initial one is executed.

Market-To-Limit (MTL). Execution of a market order that includes an instruction to place a limit order at the same price with the remainder of the position if it is not fully executed.

Market-If-Touched (MIT). Execution of a market order that includes an instruction to place a limit order at the same price with the remainder of the position if it is not fully executed.

Limit-If-Touched (LIT). Conditional order to trade with a pending order (Limit) when a specific level is reached. It is used to buy above the current price and to sell below the current price.

Good-Til-Cancelled (GTC). It includes a temporary execution period which is usually the duration of the session. If at that point the order has not been executed, it will be cancelled.

Good-Til-Date (GTD). The order remains active until a specific date.

Immediate-Or-Cancel (IOC). Instruction to execute the order immediately. If any portion of the order remains unfilled, that portion is cancelled.

Fill-Or-Kill (FOK). It does not allow partial execution. When the price is reached, it either enters the market with full volume or is

cancelled.

All-Or-None (AON). Similar to the FOK orders with the difference that in case the price reaches it and it is not executed because it cannot cover all its volume, it remains active until it obtains all the counterpart or it is cancelled by the trader.

At-The-Opening (ATO). Instruction to execute an order at the opening of the session. If this is not possible, it is cancelled.

At-The-Close (ATC). Instruction to execute an order at the close of the session.

4.4 TOOLS FOR VOLUME ANALYSIS

Thanks to certain tools that analyze the flow of orders we can see all the interaction between buyers and sellers who participate in the market in different ways.

We will mainly distinguish them by the type of orders they deal with as not all these tools are based on the same data:
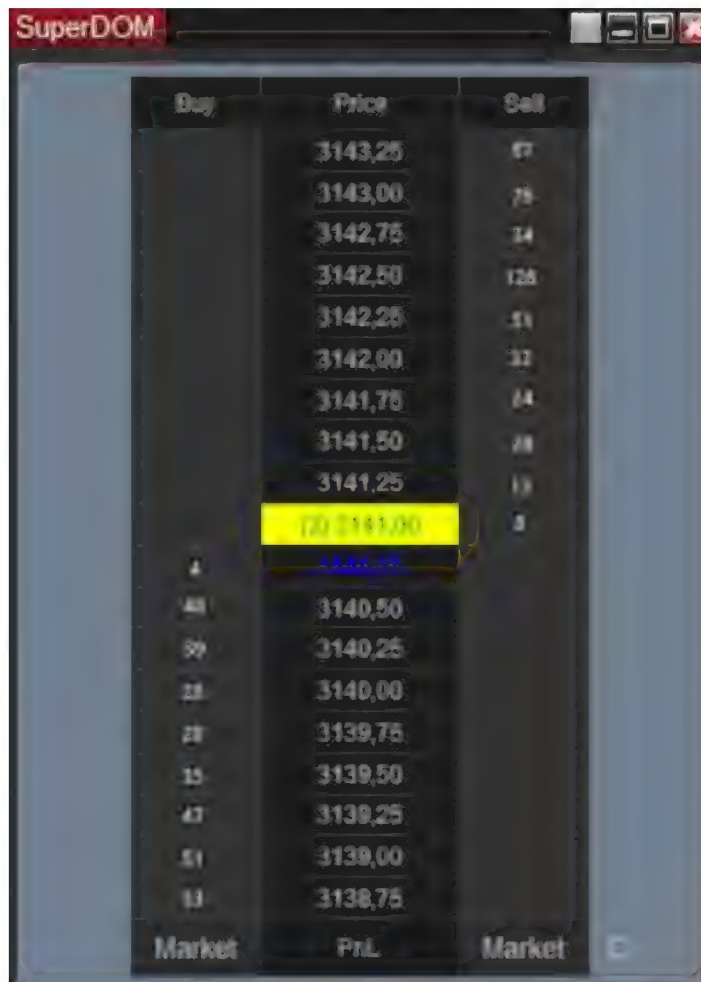
❖ Analysis of pending orders: Order Book, also called Depth of Market (DOM).

❖ Analysis of executed orders: Time & Sales and Footprint.

We will point out their most important characteristics in order to provide the reader with a basic knowledge of the peculiarities of each one.

4.4.1 ORDER BOOK

Identifies all pending orders for execution (liquidity) that are located in the BID and ASK columns; as we already know, the BID

represents pending buy orders and the ASK represents pending sell orders.

As these types of software only have Level II of depth, most markets can only show ten levels of liquidity above and below the current price. This is relevant because beyond those ten levels there will still be liquidity located, but it is only visible to those who have Level III of depth (mainly liquidity providers).

The analysis of the order book presents some problems. One of them is that the visible liquidity is never the liquidity that is actually located in those levels. The liquidity that can be seen in the order book comes only from limit orders. By their very nature, market orders cannot

be seen anywhere, since they are born from an initiative and are executed instantaneously. On the other hand, Stop orders, as they become a market order when their price is reached, are not displayed in the Order Book either.

In addition to this, as we have seen in the advanced features of some orders, there are certain instructions that are not displayed in the Order Book either, so that in reality we would be analyzing a not very high percentage of the total orders pending execution.

Another major problem with the analysis of the order book or any other tool based on this liquidity data is that these orders that are pending execution can be removed by whoever placed them there at any time before they are executed. Due to this peculiarity different forms of manipulation carried out by algorithms emerged:

SPOOFING

This is the placement of huge amounts of contracts in the BID and ASKS columns (limit orders) without the intention of actually executing them. The aim is to give the impression of an "insurmountable barrier" and cause the price to move to the opposite side. They are false orders because when the price is about to reach its level, they are cancelled and are not executed.

It is an interesting concept that highlights the value of the ability of limit orders with respect to price movement. As we have mentioned, limit orders by themselves and by their very nature do not have the ability to move the market, but using this form of manipulative activity we see how

the price can move influenced by them at certain times. Not directly based on their execution, but indirectly based on their influence.

Imagine that you normally see limit orders of around 50 contracts per price level. What will the other participants think if you suddenly see 500 contracts? Well, most logically they will see that this is a too high price to pay for the price to cross that level and most likely cause a lack of interest to go against such orders. And of course, this will result in a move in the opposite direction of the huge order. Manipulation by large traders to drive the price in the direction they want.

Iceberg orders

This is the splitting of a large limit order into smaller portions. The motivation for this type of action has to do with wanting to hide the actual size of the original order.

Mainly used by institutional traders who want to execute a huge number of contracts in a given price range and who use algorithms programmed with this technology to be able to do so passively and without turning the price against them. It is important to note that there is only one source behind such an order, just one large trader, not a collection of them.

It is very visual to take the example of a real Iceberg. On the surface what you see is a seemingly normal amount of contracts, but what you don't know is that this order is simply a part of a much, much larger one. And when this small part is filled by the market the large order quickly replenishes it.

This is the clearest example of what a **takeover** would look like. There may be many aggressive buyers pushing the ASK and all those Buy Markets are crossing the Sell Limits of an Iceberg order which do not allow the price to move up. We will say that a takeover of these purchases is taking place.

4.4.2 TAPE

Thanks to Time & Sales we can see in real time all the crossing of orders already executed. The analysis of the tape becomes very complex due to the speed at which the current markets move (mainly futures markets).

Depending on the software we can access different types of information. It usually includes at least the columns with the time of execution, the price level and the number of contracts.

It can certainly be useful for the identification of large volumes executed in a single order, known as "big trade". More modern versions also allow the grouping of orders executed in blocks, pointing to the same trader as the origin of different transactions spaced in time.

A positive point of the Tape with respect to the Order Book is that the tape represents the past, the orders already executed and therefore is

not susceptible to manipulation.

Operating solely by analyzing the tape is not within everyone's reach since it requires enormous experience as well as a great capacity for concentration due to the speed at which it moves.

4.4.3 FOOTPRINT

When most people refer to Order Flow they are actually referring to this section of the order flow, the use of Footprint. Order Flow is a general term that, as the name suggests, is concerned with order flow.

© 2020 NinjaTrader, LLC
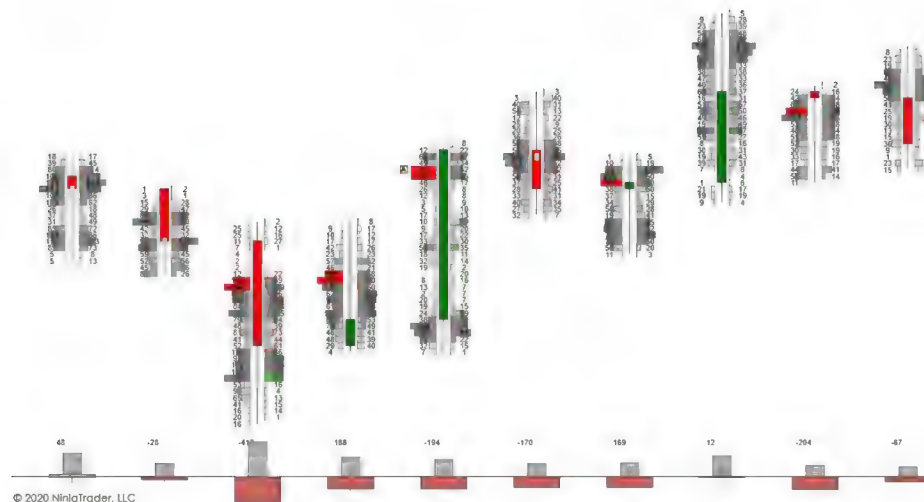
The Footprint charts the data provided by the tape (orders already executed) and represents them in a much more visual way. It would be like putting a magnifying glass inside the candlesticks and observing the number of contracts executed at each price level..

The advantage of analyzing the Footprint is that it allows us to

quantify in maximum detail the interaction between buyers and sellers. Observing the balance and imbalance between participants as well as being able to identify in which column more volume is being traded can certainly be useful at certain times.

There are different types of footprint charting based on:

❖ The nature of the data: it can be set up with time, range, volume and rotation candlesticks.

❖ The representation protocol: Profile, Delta, Imbalance, Histogram, Ladder or BID/ASK.

It is a very configurable tool that generally includes multiple functionalities although it basically analyzes the orders executed by price levels with the objective of looking for imbalances, takeovers, initiatives, unfinished auctions, clusters, big trades etc.

Once you know in depth how the order crossing is executed, you will come to the conclusion that its analysis is very subjective and that trading based on this tool without taking into account anything else is not advisable.

4.4.2 DELTA

A more specific and popular tool in the world of Order Flow analysis is the Delta. The delta is an indicator that simply measures the difference between the volume traded on the BID and the volume traded on the ASK in a given period of time. If the difference is positive the delta

will be positive and vice versa if it is negative. In addition, the difference between deltas can also be visualized since the indicators will normally show them with different sizes.

There is a common misconception that all volume traded on the ASK "are buys" and all volume crossed on the BID "are sells", although in reality with that statement they mean that they are directional in origin; that is, they have an intention to add pressure towards one of the sides. If this were so, why do we sometimes see bearish moves with positive deltas and bullish moves with negative deltas? Believe me it's not that simple. If it were, we would have found the Holy Grail. Again it has to do with the crossover mechanism.

© 2020 NinjaTrader, LLC
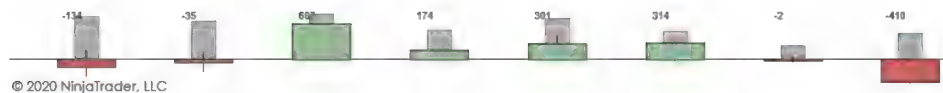
For the time being, let's keep in mind that it is visually observed on a horizontal axis with value 0 and that depending on the column where the transactions are executed, it will be displayed positively or negatively on the axis. This representation would be for the example of the normal Delta since there is another variant, the accumulated, where it is charted continuously without taking into account the horizontal axis.

The delta is updated at each executed order and therefore gives rise to the possibility that, as with the price, wicks are represented at its extremes. If we observe a delta with a wick in its lower part, what it means is that at a certain moment of its development the difference in favor of the BID was extraordinarily large, and that at a certain point it has begun to negotiate much more actively in the ASK column, generating that reversal that leaves its mark in the form of a wick.

As it happens in general terms with the analysis of the footprint, although its interpretation is not as basic as I have explained above, it can provide us with certain usefulness at certain specific moments.

4.5 THE ORDER FLOW PROBLEM

As a basis, we must be clear about a series of ideas that will help us to understand the rest of the content:

1. A purchase is matched to a sale and vice versa.

2. An aggressive order is matched with a passive order.

3. In the columns of the BID and the ASK only the aggressiveness is reflected.

Considering the different types of orders, it is now necessary to understand what mechanism is used to match orders between participants and in which column this execution is reflected.

Order type	Matches with	Appears in
Buy Market	Sell Limit	ASK
Buy Limit	Sell Market	BID
Buy Stop	Sell Limit	ASK
Buy Stop Limit	Sell Market	BID
Sell Market	Buy Limit	BID
Sell Limit	Buy Market	ASK
Sell Stop	Buy Limit	BID
Sell Stop Limit	Buy Market	ASK

❖ Stop orders become Market orders when they are filled.

❖ Stop Limit orders become Limit orders when the price set by the Stop order is reached.

When the trader executes a Buy Market order, the order processing mechanism kicks in and goes to the Order Book to find the first Sell Limit order located in the ASK column to match this buy.

The same happens when a Sell Market order is executed. The processing mechanism directs that order to the most immediate price level of the BID column to find the counterpart in the Buy Limit orders that are pending to be matched there.

With limit orders the process is the same. A participant leaves his order pending execution in one of the two columns and it will stay there until an aggressive trader arrives who needs to match his order.

This is essentially what happens over and over again at high speed. Regardless of the type of order used to enter the market, the end result will always be that an aggressive order will cross with a passive one:

Buy Market	X	Sell Limit	=	ASK
Sell Market	X	Buy Limit	=	BID

And the column on which those order crossovers will be displayed will depend on the order that initiated it. Therefore:

- ❖ Buy Market crosses with Sell Limit and is displayed in the ASK column, since the order that initiated the transaction is the aggressive buy.

- ❖ Sell Market intersects with Buy Limit and is shown in the BID column since the initiation comes from the aggressive sell side.

Now let's do a reasoning exercise using as an example a trader who enters the market with a short position (sell). This trader has different ways to exit this position:

❖ Through a manual exit, either in loss or in profit by executing a buy Market order (and it would appear in the ASK).

❖ By executing the stop loss (stop loss), whose order will be a buy stop (and would appear in the ASK).

❖ By executing the take profit, whose order is a buy limit (and would appear in the BID).

Similarly, a trader who enters the market with a long position (buy) can leave it through three options:

❖ Through a manual exit, either at a loss or at a profit by executing a sell market order (and would appear in the BID).

❖ By executing the stop loss, whose order will be a sell stop (and would appear in the BID).

❖ By executing the take profit, whose order will be a sell limit (and would appear in the ASK).

The point of this example is that the same action, such as closing a position, can be shown in different columns (BID and ASK) depending on the type of order used for it.

Understanding this information is of tremendous importance because many analyses of order crossing are erroneous because they start from wrong premises.

The first conclusion should therefore be that not everything that appears executed in the ASK column is buying with the intention of

adding buying pressure to the market and not everything that appears in the BID column is selling with the intention of adding selling pressure. Herein lies the problem when analyzing order flow in any of its variants.

These programs based on the order crossing mechanism are set up to always reflect aggressiveness, the problem is that it is not possible to distinguish what intention is behind the executed orders.

When we see a cross executed in the ASK it will always be a Buy Market with Sell Limit order; while when we see a cross executed in the BID it will be a Sell Market with Buy Limit order, but what we will not know is the origin/intention behind such a cross order:

Intent of the orders executed at the BID	Intent of the orders executed at the ASK
Aggressive selling	Agressive buying
Passive buying	Passive selling
Manual closing of a buy	Manual closing of a sell
Stop Loss of a buy	Stop Loss of a sell
Take profit of a sell position	Take profit of a buy position

The main source of error when dealing with order flow analysis comes because there is the belief that everything executed in the ASK has a buy initiative origin and everything executed in the BID has a sell initiative origin, but as we have just seen, nothing could be further from the truth. This type of software makes a reduction to the execution of aggressive orders with passive, but they cannot know what the origin/intention of those orders is.

What would happen if there is a crossing of orders of a Stop Loss

of a Buy Market and a Take Profit of a Sell Limit? This type of crossover will be reflected in the ASK, but is there really an intention to add buying pressure to the market? Obviously not, as we see in this example both traders would be out of the market and yet their transaction would be reflected in the ASK. This is the problem with Order Flow: it remains a highly subjective tool. Even more so when you do not know perfectly how order crossing works..

The same problem is encountered for the BID column. There could be the possibility of a matching of orders from someone who has triggered the stop loss of a buy position (Sell Market) with someone who wants to take profit from a sell position (Buy Limit). This crossover would be reflected in the BID but both are out, there is no new selling pressure.

I will now present two different contexts to exemplify again the Order Flow problem:

4.5.1 PROBLEM #1 PRICE DIVERGENCE

For example, if we analyze the chart of the footprint we see a bullish development in which at the top there is an imbalance (green bottom) in favor of the ASK with a downward turn immediately after; this fact offers us different interpretations.
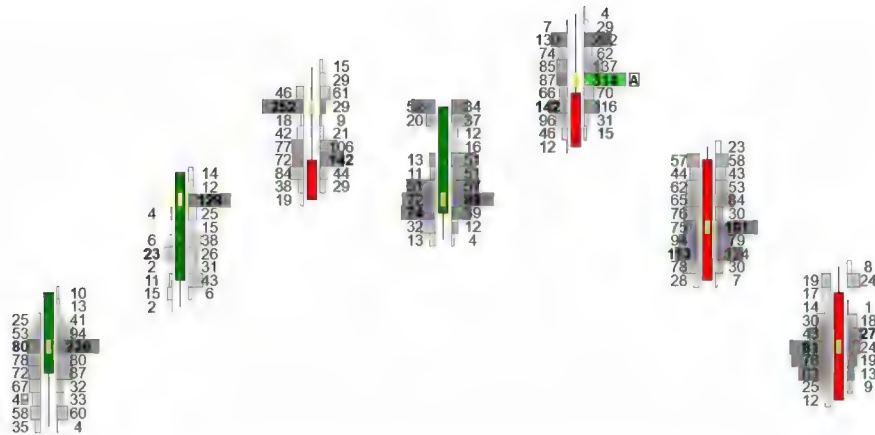
Some will say that they are trapped buyers (assuming this imbalance in the ASK as aggressive buying with directional intent); others will say that they are executions of stop loss orders of long positions; still others will say that they are profit taking of long positions; and finally some others may say that it is a passive entry of sellers (takeover through sell limit orders).

All of them are probably right. And the truth is that most probably there is a bit of all of them. Also, at that point most likely the delta is negative, showing us a divergence.

This is where the problem becomes apparent when analyzing Order Flow. The truth is that in real time we cannot determine exactly what the true origin of these executions is. In many cases, in order to justify a proposed scenario, one of these particular reasons will be alluded to. For example, someone who is looking for a bearish move or who is already positioned short will see those large orders executed on the ASK and assume them to be "trapped buyers", as that is the reason that would justify their bearish approach.

The only objective in this example is that, as it appears in the ASK column, it is a cross between Buy Market and Sell Limit orders; but to

state categorically that it is any of the possible origins already described does not seem to be a very solid approach.

Hence the importance that, in the event of deciding to work with Order Flow, the most logical thing to do would be to subordinate its analysis to the context provided by another approach such as, in our case, the Wyckoff methodology. The reason for this is that due to the complexity and nature of order matching we are going to find this type of imbalance in any part of the chart and this does not offer us an advantage.

4.5.2 PROBLEM #2 DELTA DIVERGENCE

What happens when the Delta is not in agreement with the price? In a positive Delta its candlestick is expected to be bullish; and in a negative Delta, bearish. Divergence would appear when we observe a negative Delta on a bullish candlestick or a positive Delta on a bearish candlestick.

© 2020 NinjaTrader, LLC
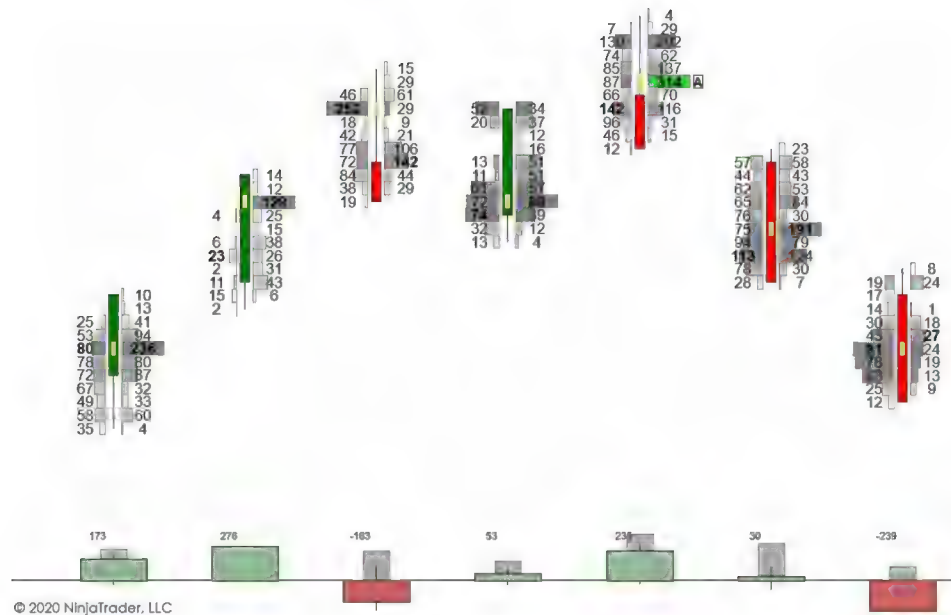
If all that appears on the ASK were market buying with the intention of adding upward pressure, it is impossible for a positive Delta to result in a bearish candlestick.

Continuing with the same example as above, we see that the bearish candlestick that originates the turn has a very positive delta (+235).

The reasoning behind this situation could be as follows: The positive delta may be the result of many aggressive buys (Buy Market) that have been blocked with passive sells (Sell Limit) and have not allowed the price to rise. All these crossing orders appear in the ASK. Subsequently, if there is little demand in the BID (few Buy Limits), a few aggressive sales would cause the price to move downwards. And this is one way in which a positive delta with a bearish candle would eventually be observed.

© 2020 NinjaTrader, LLC
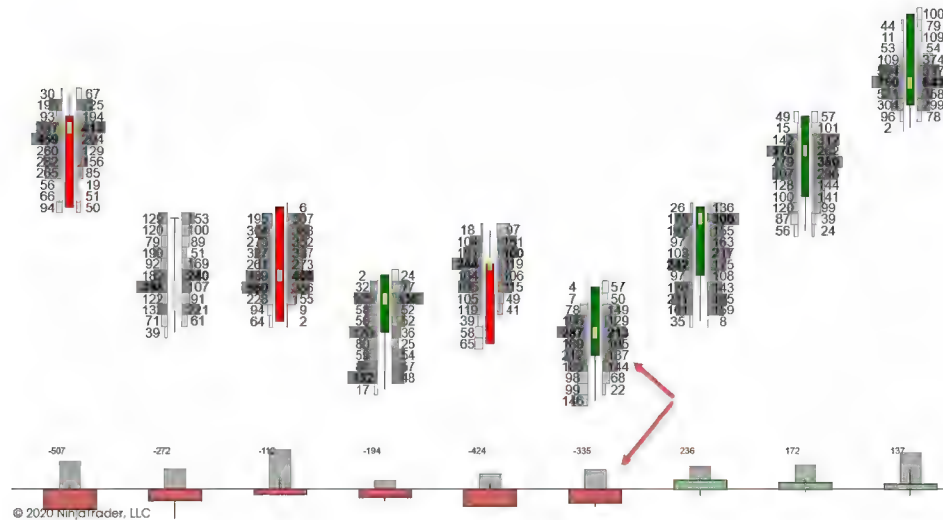
As you have probably concluded, delta divergences implicitly identify a takeover so if they appear in the right place they usually anticipate interesting turns. This does not mean by any means that all divergences will establish turns since sometimes these will occur over an area of little interest and without that intention of takeover behind, hence the problem of its use arbitrarily.

4.5.3 PRICE AND VOLUME TRADER

In the end, our task as traders is to identify when imbalances between supply and demand occur and these will eventually show up on the price and volume chart.

A trader who only takes into account the price and volume action may enter the market with some delay and may not have certain information available (the real interaction between the participants) but his trading will be much calmer as he will not have to interpret those order

crosses.

In the previous example of price divergence, the trader who simply analyzes the price action and volume will only focus on the fact that an anomaly has occurred in that action, a divergence effort result. That large number of executed orders will most likely be accompanied by an increase in volume and a narrow range already denoting some divergence. In addition, a subsequent downward turn would confirm this anomaly.

Beyond assessing whether there has been a jump of stops, profit taking, entry of short positions or that buyers have been trapped, which as we have already mentioned is probably a bit of all of the above, what is relevant is the final action and the trader who does not observe the flow of orders but knows how to interpret the chart will eventually reach the same conclusion, albeit with less stress.

4.5.4 CONCLUSION

In addition to everything discussed with respect to order matching, it is the precise moment to also recall the different types of agents that operate in the market and the intention behind their actions (hedging, speculation and arbitrage). The orders executed by these participants are also displayed on the BID and ASK, and as we have seen, not all of them have directional intentions which are ultimately those seeking price movement.

This is no small matter as the only ones who will show up again to defend their position in case they have aggressively entered the market

seeking a profit from the price move will be the speculative traders. We may see the execution of a large order at a price level and it may come from an institution with the objective of covering a position held in another parallel market, or it may be the activation of an arbitrage strategy, to name a few possibilities.

We therefore add a new layer of opacity and subjectivity. We have on the one hand that not all participants come to the market with a speculative interest; and on the other hand that the matching of orders cannot determine the origin of such trading.

We come to the conclusion therefore that the use of Order Flow independently could be totally meaningless since in no case can it offer us what is the most important aspect to determine in the market: the context; knowing exactly where we are going to look for trades and in which direction. Trying to understand this is vital in order to be able to perform solid analysis and scenario planning.

PART 5. VOLUME PROFILE

The Volume Profile is a variant of the Market Profile®, a tool designed by J. Peter Steidlmayer in 1985 for the Chicago Board of Trade (CBOT®). Steidlmayer was a trader and executive member of this important futures and options market for over 40 years. This new method of auction representation was initially intended only for CBOT members although it quickly spread outside. We can therefore intuit that his approach to how the market moves does not appear to have been ill-founded.

Unlike the Order Flow analysis, the Volume Profile is totally objective as it does not require any interpretation and therefore provides us with very useful information for our analysis and scenario approaches.

With the Volume Profile analysis we come back to all the concepts initially presented in the Auction Market Theory. We do not focus on

determining the intent of a particular order crossing, but rather broaden the picture to identify the most relevant trading zones.

The Volume Profile is not an indicator. It is simply another way of representing volume data. It identifies very clearly and precisely the number of contracts traded at different price levels.

5.1 AUCTION MARKET THEORY + VOLUME PROFILE

The Volume Profile uses the principles of auction theory to put it into practice and to visualize the areas of interest on the chart. Interest is simply measured by the activity that has been generated in a particular zone; and this activity is identified by the volume traded.

This tool will therefore help us to identify the zones of greater and lesser interest and will help us to evaluate the price when interacting with them in order to determine whether acceptance or rejection is taking place.

All these principles are based on the premise that the market has a memory and tends to repeat behavior. It is therefore expected that in the future certain areas will again behave in the same way as they did in the past.

One caution to keep in mind is that the market's memory is primarily short term. This means that more recent trading zones are more important than older ones. If the price initiates an imbalance the first zone to be taken into account will be the most immediate previous balance zone.

The longer the price has been away from a certain acceptance area, the less significant it will be. If we have no other reference, it will still be useful to value it, but it is important to be aware that the most immediate equilibrium zones will most likely be the ones that the market will look for in the first instance since they are the ones that best represent the value at the present moment.

5.2 VOLUME PROFILE COMPOSITION

Volume profiles are visually observed on the chart as a horizontal histogram where their values are distributed according to the trading at each price level.

Depending on the number of contracts traded at each price level, the shape of the distribution will vary. The more trades, the longer the length of the horizontal line; while a short horizontal line represents little trading.

As a reference we will take a normal or Gaussian Bell distribution to understand the most important statistical concepts:
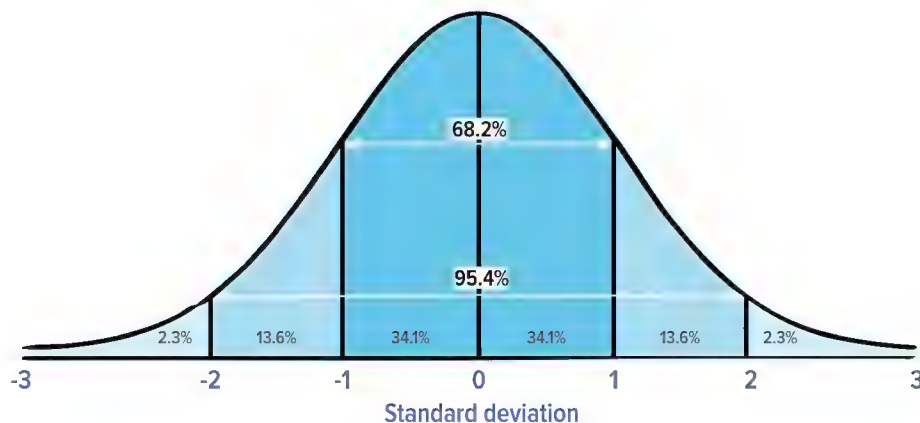
❖ The data are symmetrically distributed with respect to the

central point where mean, median and mode coincide.

❖ It has three standard deviations on each side, which are equally spaced and measure the amount of variability or dispersion around an average. It is also a measure of volatility.

❖ The first standard deviation comprises 68.2% of the data and up to the second deviation it reaches 95.4%.

VALUE AREA (VA)
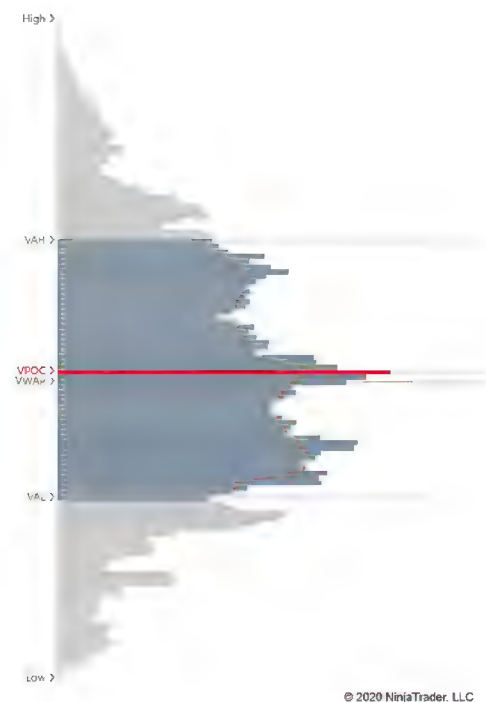
This real example is in the form of a normal distribution where the values are distributed up and down around the central point.

The data are organized by a vertical axis on which the **price** is located and a horizontal axis representing the **volume** variable.

The value area is determined between the **Value Area High** (VAH) and the **Value Area Low** (VAL), is part of the first standard deviation and represents exactly 68.2% of the total volume traded in that profile. It is the most traded area of the profile and is therefore considered the area of acceptance.

The volume traded outside the value area comprises the remaining 31.8%. This is the least traded area of the profile and is therefore considered a rejection area.

The high and low levels of the value area (VAH and VAL) will act as support and resistance areas as some interaction is expected above them.

The breadth of the value area leaves clues about market conditions. A wide Value Area suggests that there is a large participation of all traders, everyone is buying and selling at the prices they want; while a narrow Value Area is a sign of low activity.

EXTREMES

This is the highest (High) and lowest (Low) price reached in that profile. These price levels should always be viewed as key reference points.

Depending on the trading generated at these extremes we can consider that they represent finished or unfinished auctions.

Finished auction. It is visually observed with a decreasing negotiation towards the end. It represents a lack of interest as the price

reaches price levels further away from the value zone, finally suggesting a clear rejection of the market to trade in that zone. By its very nature it is a Low Volume Node.

Prices have reached a point where some traders have considered it as an advantageous opportunity and have entered causing this rejection. The lack of participation from the opposite side is represented by this decrease in volume.

Unfinished auction

It appears as a High Volume Node on the end of the profile. Implicitly it represents interest to negotiate in this zone and therefore suggests a later visit of the price in case it has previously moved away from it. In the future visit it will be necessary to evaluate the intention behind it since it could develop with the objective of finishing the auction and turning around, or with the objective of continuing trading and continuing in that direction.
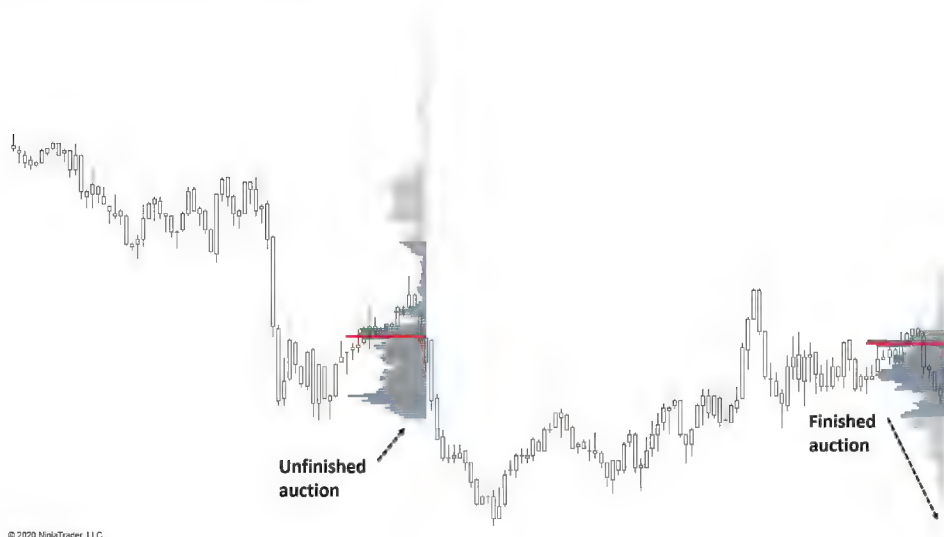
This concept of finished or unfinished auction can be very useful because if, for example, we are assessing the possibility of the price leaving an equilibrium zone upwards, we will want to see that at the bottom of that zone there is a finished auction that would suggest a lack of interest in trading there. In case of observing a possible unfinished auction it would be convenient to quarantine the scenario since it is most likely that before starting the upward movement there will be a visit of the price in that low part with the objective of testing the interest in that zone.

When in doubt as to whether we are in a possible finished or unfinished auction, it is advisable to treat it as finished. Unfinished auctions should be very visual and should not be involved in much subjectivity. Generally we are going to observe them as an abnormal cut in the distribution of the profile and in many occasions it will coincide with one of the two limits of Value Area.
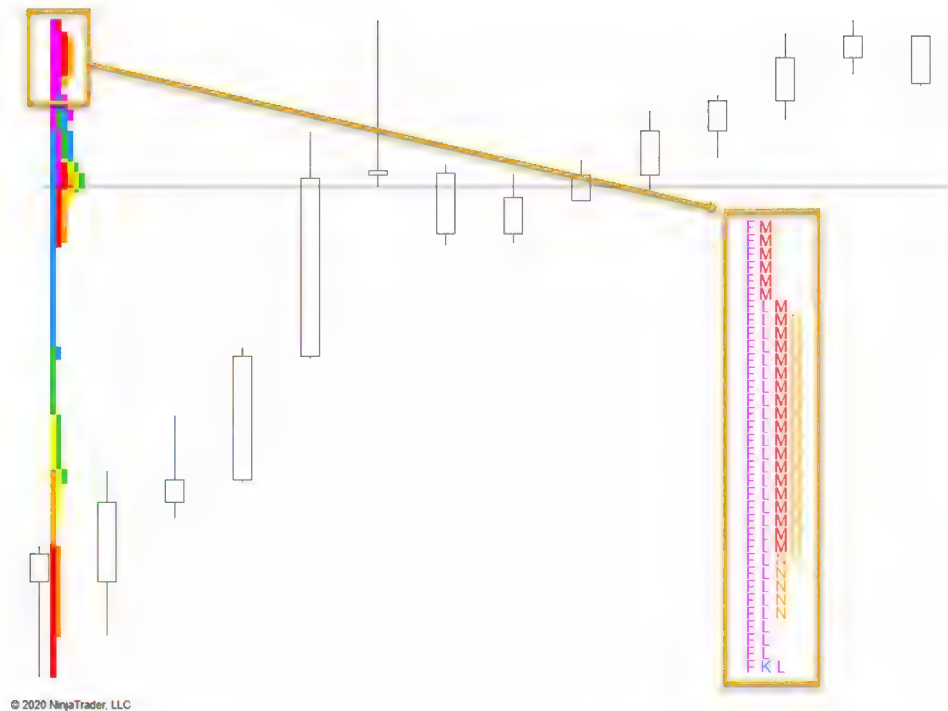
In Market Profile this concept is totally objective: an unfinished auction (Poor High & Poor Low) appears at one end where at least two TPOs are observed; in other words, a finished auction will be represented with a single TPO at the price level (Single Print).

VOLUME POINT OF CONTROL (VPOC)

This is the level of highest volume concentration in that profile. It represents the price most accepted by both buyers and sellers (fairer) and sets the level from which the value area is calculated.

Since most of the volume comes from large institutions, this is where these large traders have accumulated most of their positions. They generally accumulate contracts in a range of prices but the VPOC represents a benchmark as it identifies where the most interest is.

As it is a level that will attract a lot of trading, it is generally advisable to avoid trading in its vicinity. The broad consensus among participants will cause fluctuations around this level. This behavior will continue until new information appears that unbalances the participants' perception.

The VPOC allows us to establish who is in control of the market. If the price is above it, we will determine that the buyers will be in control, so it would make more sense to trade long; if it is below it, the sellers will be in control, so trading short would be a better option.

Keep in mind that the VPOC, by its very nature, will always be a High Volume Node, but not all High Volume Nodes will be VPOCs.

VOLUME WEIGHTED AVERAGE PRICE (VWAP)

If there is one level widely used by large institutions it is VWAP. Huge transactions seek to execute at the price level where the VWAP is found and that is why it has elevated its level of importance.

The VWAP represents the average price of all contracts traded during a particular time period. The formula for obtaining it is as follows:

❖ No. of contracts traded * price of the asset / Total contracts traded

To understand it a little better, we can say that above the VWAP there is the same volume traded as below it, i.e. it represents an important equilibrium level. This equilibrium means that when the price reaches the VWAP there is the same probability that the price will go up or down.

It is displayed on a chart like a traditional moving average and its position varies as trades are executed. Generally, depending on the trading style, the VWAP of the session, the weekly or the monthly is used.

The VWAP is used by institutional traders primarily as an average to determine the value of the asset at that point in time so they consider that they have bought low if the price is below and high if it is above.

Institutions have taken the VWAP as a reference measure with which to judge the quality of their executions, hence its relevance and the fact that we treat it as an important trading level.
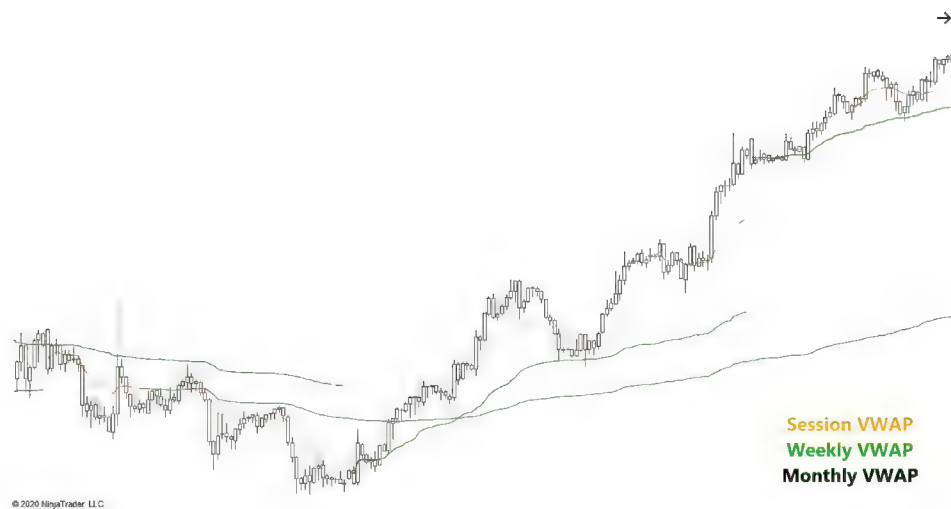
When they receive an order, they do not execute all the contracts they need at one time, but will try to do so gradually, knowing that their work will be judged on the basis of this reference level.

Since it represents an important equilibrium level or fair price, it is a good measure of whether we are buying too high or selling too low. We can tell this by adding one or two standard deviations to the mean. Just because the price is at some standard deviation does not mean that it cannot continue to move in that direction, we could simply use it as one more footprint to add to our analysis.

But be very careful because everything is subject to the valuation of the market at that moment. In a market in balance a price below the VWAP will be considered cheap and a price above it expensive; but just as the market becomes unbalanced to one side or the other the VWAP no longer represents efficiency as now the perception of value has changed.

Depending on the time frame we can make use of different levels of VWAP. The most commonly used are the session VWAP for intraday traders and the weekly and monthly VWAP for medium and long term traders.

HIGH VOLUME NODES (HVN)

High volume nodes. These are zones that represent balance and high level of interest by all market participants as both buyers and sellers have been comfortable trading there. It is observed as peaks in the volume profile.
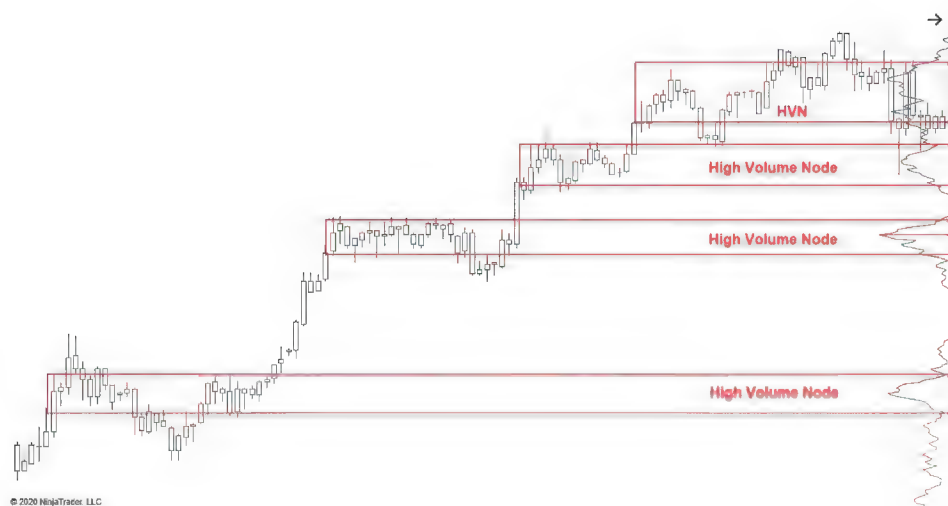
Although we have used a composite profile for this example, the

fundamentals are equally valid and applicable to all profiles.

Past balance zones act as magnets attracting the price and keeping it there. As in the past there was some consensus between buyers and sellers, in the future exactly the same is expected to happen. That is why they are very interesting areas for target setting.

Different High Volume Nodes can be identified within the same profile.

Low Volume Nodes (LVN)

Low Volume Nodes. These are areas that represent imbalance/rejection. Neither buyers nor sellers have been comfortable trading and therefore are considered in some way "unfair" prices. They are observed as valleys in the volume profile.

As in the past there was no consensus, it is expected that in the future there will be no consensus either and cause some rejection, so they are interesting areas of support and resistance where to look for potential entries.

It is important to understand that rejection can be represented by the price in two ways:

Quick movement
V- turn

© 2020 NinjaTrader LLC
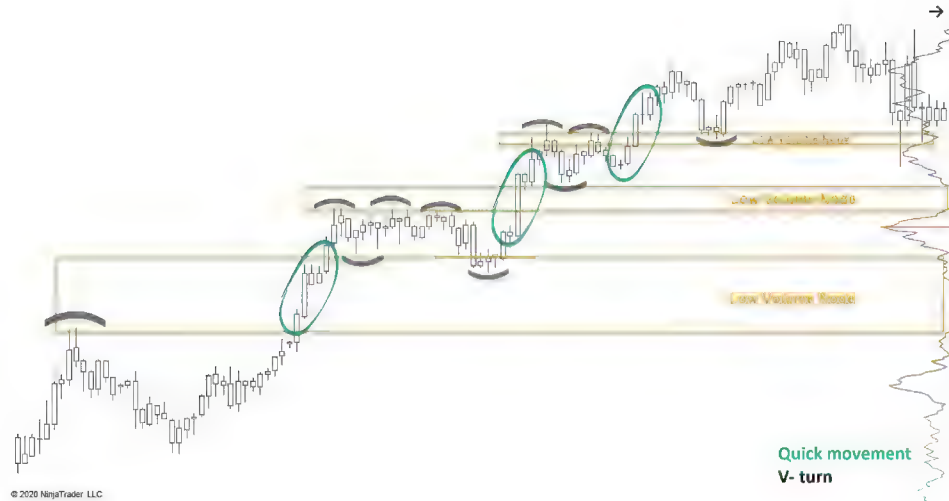
V-Turn

The perception of the value has not changed with respect to the previous equilibrium zone and there is a rejection to trade at these levels. The market turns completely around to re-enter the previous zone in which buyers and sellers feel comfortable trading.

What triggers this price reaction is firstly the placement of passive orders waiting above that area to block the move, coupled with a subsequent aggression that confirms the V-turn and return to the previous value area.

Visually it may be observed in the price as prominent wicks at the ends of the candlesticks which will suggest such rejection.

Rapid movement

Participants' perception of value has changed and is represented in the price by a violent movement. The market, based on the new information, rejects trading at these LVN levels and moves quickly through them.

Technically, what causes this rapid movement is, on the one hand, the execution of stop loss orders by those who are positioned on the opposite side; and on the other hand, the activation of momentum strategies that activation of momentum strategies that enter aggressively with market orders.

Visually, it will be observed on the chart with wide range candlesticks generally accompanied with high volume.

As with HVNs, more than one Low Volume Node can be displayed within the same profile.

5.3 TYPES OF PROFILES

The volume profile is a tool that can be adapted according to the operator's needs.

The main difference when using one type of profile or another will be determined by the trader's timeframe and the context he needs to cover in his analysis.

Basically we can differentiate three types of profiles:

FIXED RANGE

This type is very versatile. Its peculiarity is that it allows us to launch profiles manually on any particular price action.

It is especially useful for identifying trading zones in two types of contexts: trend movements and ranges.
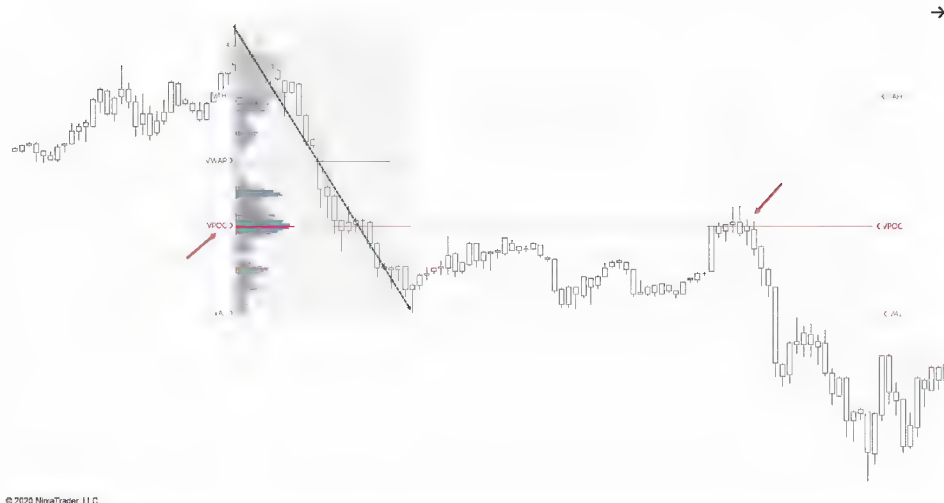
If we see a bearish movement we can launch a profile of the whole momentum to identify the interesting zones over which the price is likely to make some kind of bullish pullback. It is in those trading zones where we want to be prepared to evaluate the possibility of entering in favor of the trend. In the example we see how the price makes a test to the VPOC of the bearish momentum and from there it generates a turn that causes the development of a new bearish movement.

If what we have is a context of lateralization, a structure of those we work under the Wyckoff methodology approach, the profile will come in handy to identify mainly where is the VPOC that determines the market control and the value zone with its extremes (VAH and VAL). These will be very interesting to take into account in order to look for the test after the breakout of the structure, as in the following example.
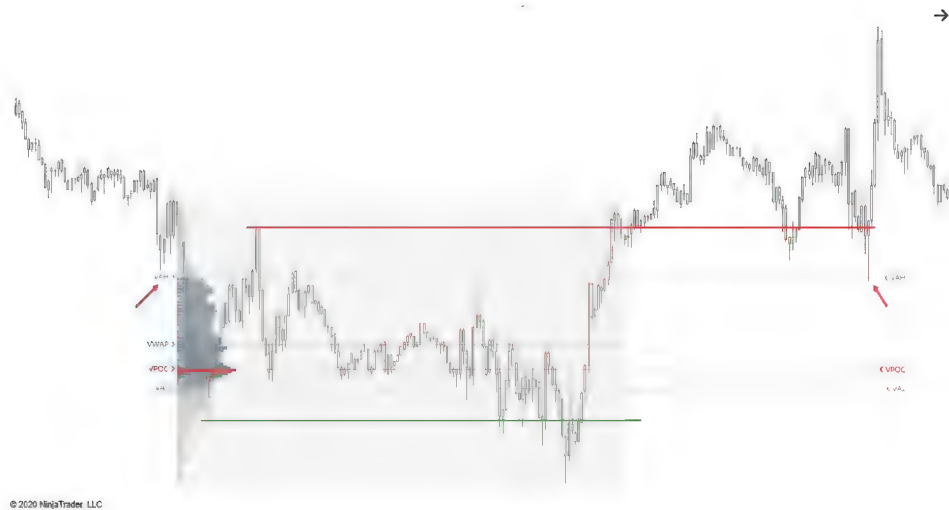
Unlike the other types of profiles, the fixed range is not updated and only analyzes the volume traded in the area to be determined.

Regardless of whether you are going to work with structures or not under the Wyckoff methodology approach, it is very useful to pull profiles that encompass several sessions in case we see an overlap between their value areas. If we see more than one session generating value over a certain price range, it is best to launch a profile that includes all the price action, since the operating levels that such a profile can provide us with will have by their very nature a greater relevance.

SESSION

This is the profile of the day. It is especially useful for intraday trading where the most important trading zones of the session are taken into account. It ranges from the beginning to the end of the session and is updated as the day progresses.
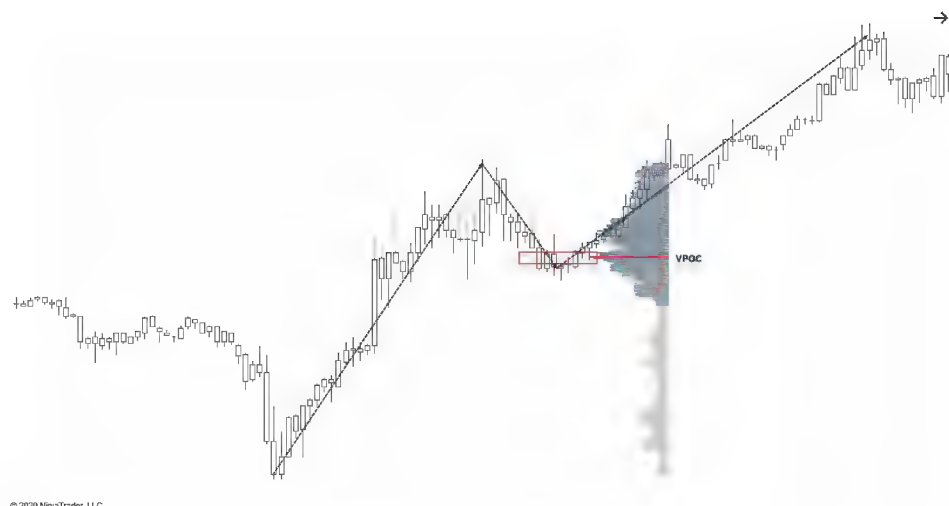
Shorter-term traders use both the levels of the session and those of previous sessions to make their scenarios.

If we are observing a bullish movement and a subsequent lateralization of the price, it would be interesting to look for the incorporation in favor of the trend movement on some operative level. As we know, the most important level of the whole profile is the VPOC so we must take it into account to wait for our entry trigger on it.
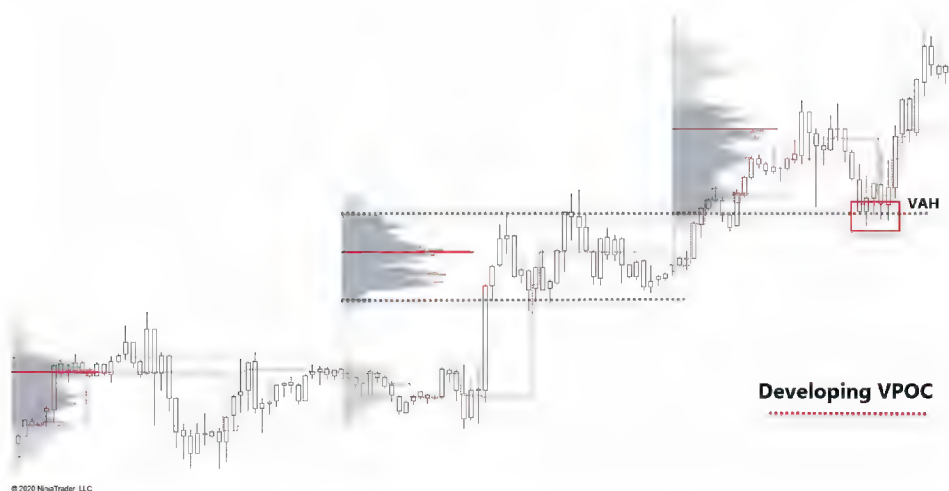
Continuing with this same example, another interesting area on which to look for a test after a breakout could be an operating area of previous sessions. If we are above the value area of the previous session,

the first operating level on which to expect a test to look for the bullish continuation will be the Value Area High of the profile of the previous session.

COMPOSITE

Originally the profiles were displayed only by sessions and this idea of grouping them was introduced by Donald L. Jones in his book "Value-Based Power Trading" in what he called "The Overlay Demand Curve". The objective was to try to eliminate the noise of the shorter term and thus get a better understanding of the market condition, of the context.

This type of profile can be set up in two ways:

❖ Fixed. Within the fixed mode we have the possibility to select the range of dates we want to include in the profile analysis. You may want to know the profile for the past week, the past month or the current year, this mode is designed for this particular requirement.

❖ Variable. The variable mode has the important peculiarity that it shows the traded volume of all price levels that are currently on the chart. It is important to keep this in mind because if the chart is moved, the profile will change.

The best use of this type of profile, regardless of the time frame in which we are trading, is to analyze the overall context and identify the trading zones (mainly the high and low volume nodes) that we have both above and below the current price.

Composite

© 2020 NinjaTrader LLC

These zones will serve to indicate the bias of the market in a more macro context as well as for the establishment of possible zones where to look for entries and exits.

If for example we are working on a structure, it is very interesting to analyze the profile of the Composite to identify the longest term High Volume Nodes on which to establish targets for profit taking.

Another use could be to identify in the macro context a large Low Volume Node and to encourage the development of a shock on it. We could be working a potential cumulative structure. If when analyzing the context we identify an LVN relatively close to the structure, it would be interesting to take into account the possibility of the Spring that generates the imbalance of the structure.

5.4 DIFFERENCE BETWEEN VERTICAL AND HORIZONTAL VOLUME

Many who look with some suspicion at the Volume Profile allude that it is not necessary to incorporate this type of tool in order to be able to make solid analyses and approaches based on volume data.

This is absolutely true; it is obvious that there is absolutely nothing necessary. The problem is that they fail to understand what kind of information they can acquire through their evaluation.

The first thing that should be conveyed is that the Volume Profile was not developed as a substitute for the classic volume. They provide different information and are therefore completely complementary.

To really understand what information is provided by volume data, it is necessary to examine it from two points of view:

❖ **Volume in time**: This is the classic volume that is observed vertically on the chart. It has to do with the number of contracts exchanged within a certain period of time. It tells us when the major traders are active.

❖ **Volume in price**: This is the Volume Profile and is observed in

the form of horizontal bars. It indicates the number of contracts traded within a certain price level. It tells us where the activity of the major traders has taken place.

As we can see, both provide us with different information about the same action (professional activity), volume in time has to do with when, while volume in price has to do with where.

With the vertical volume we can know that during the development of a particular candle a specific number of contracts have been traded, but how has the trading been distributed through the different price levels? This is the information that horizontal volume gives us and that classical volume cannot. It is quite another matter if you need to know this information for your trading.
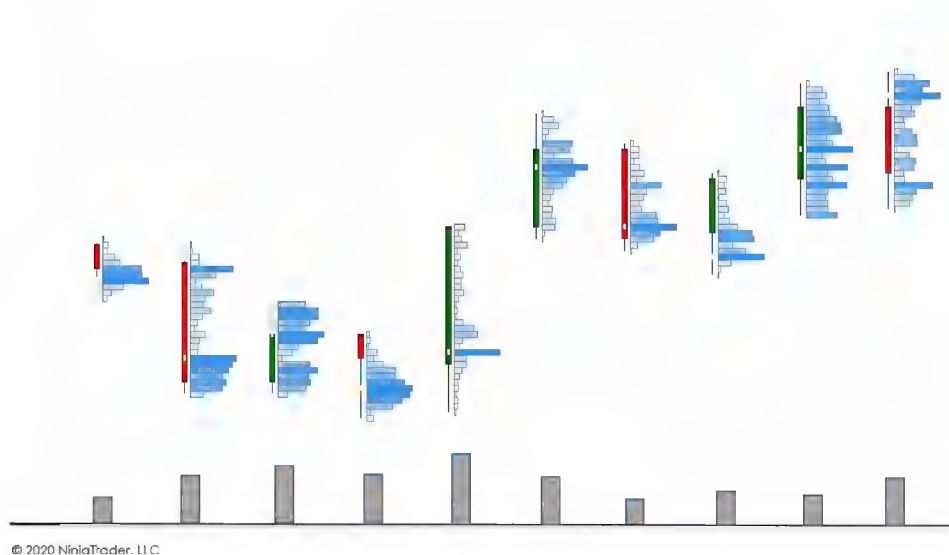
5.5 DIFFERENCE BETWEEN VOLUME PROFILE AND MARKET PROFILE

The main difference between the two tools is that the Market Profile is designed based on time, while the Volume Profile is designed based on volume.

© 2020 NinjaTrader, LLC

The Market Profile represents the price data on the chart in letter format, where each letter (called TPO or Time Price Opportunity) is identified with 30 minutes of trading. So, the letter A will correspond to the first 30 minutes after the opening of the session, the letter B to the next 30 minutes and so on, adding letters and minutes until the end of the day.

Traders who base their trades on Market Profile analyze the opening of the day with respect to the value area of the previous day and the evolution of the Initial Balance (range that covers the first hour of trading) to determine the type of day that is likely to happen and propose scenarios based on this. It should be noted here that some traders determine the Initial Balance based on the first half hour only.

Although Volume Profile traders usually do not take the Initial Balance into account, the message it conveys can be very interesting mainly because:

❖ The narrower its range, the greater the probability of a trending day; and the wider the range, the greater the probability of a sideways day.

An interesting use that MP offers us is the objective determination of acceptance or rejection on a price level. While in Volume Profile this can be shrouded in subjectivity, Market Profile analysis eliminates this discretionality: rejection is visualized by 1 TPO; while 2 or more TPOs begin to represent acceptance.

The development of the distribution of the profiles of both tools will tend to look quite similar if both tools will tend to look quite similar although they will not be exactly the same. This is obvious since they do not use the same data for their representation. An accumulation of TPOs

will indicate that the price has spent a long time at that level, while an accumulation of volume will tell us that a large number of contracts have been exchanged at that level.

In Volume Profile, as it is designed according to volume, the most traded level will not necessarily be the level where the most time has been spent; since the price may reach a level that in a few seconds accumulates a large number of orders and turns around (as in the example). The time that the price will have spent at that level is little but the volume traded is a lot so the Volume Profile POC will be at that level while the Market Profile POC will not.

© 2020 NinjaTrader, LLC
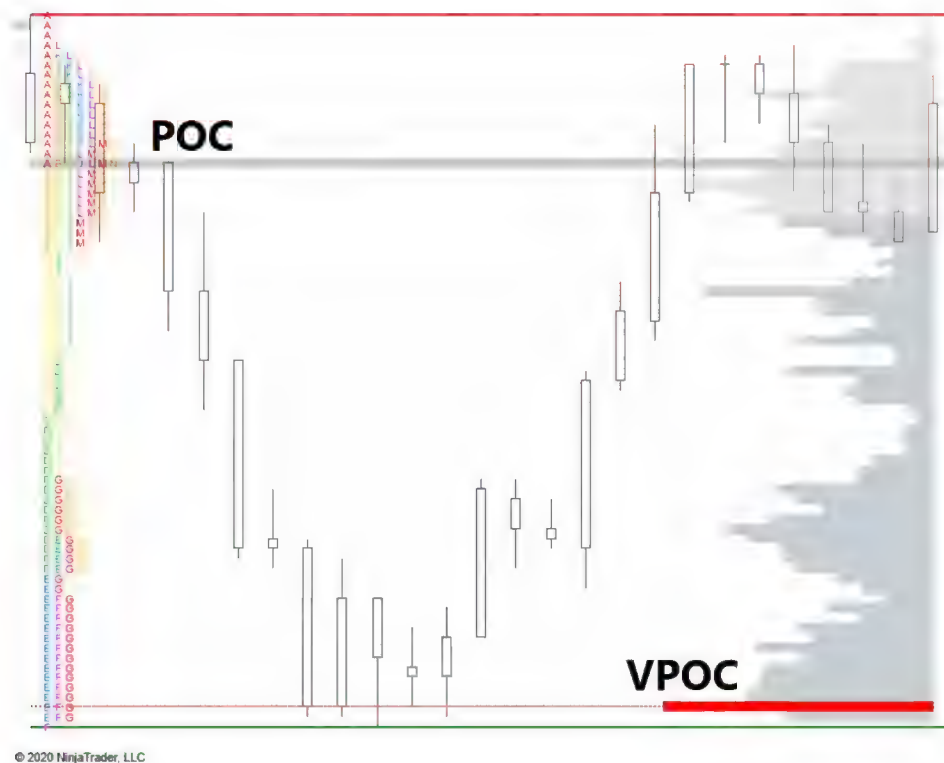
Due to the current ecosystem of financial markets where the importance of volume is highlighted, it would seem more interesting to use the combination of price + volume (Volume Profile) rather than price + time (Market Profile).

This is not to say that the time variable is unimportant or less important, nothing could be further from the truth. Obviously, time is a key element in establishing where participants decide the value of a particular market is at a particular moment in time. The consumption of time in a given area is an unquestionable sign of acceptance and therefore value building.

5.6 PROFILES SHAPES

As is obvious, the market will not always develop D-shaped profile distributions as this would mean that we are in an infinite equilibrium context.

There is a lot of theory written in Market Profile about the different types of days based on the shape of the profile (normal day, normal variation, trend day, double-distribution trend day, non-trend day, neutral day, neutral day extreme).

The truth is that identifying the shape of such profiles to determine what kind of day we have had may be valid for the human mind from the point of view that we always want to control everything and need to look for a logic to every behavior; but from a trading point of view it does not seem to be a very useful approach since the categorization is done by an a posteriori analysis.

Furthermore, over time evidence has been provided that it is not possible to consistently predict what type of day we are most likely to have based solely on the previous day's categorization. Steidlmayer himself eventually acknowledged this. Unsurprisingly, it is impossible to know what shape the current session profile will have until the session has

ended.

It is exactly the same with the labeling of events, phases and structures under the Wyckoff methodology approach. It may be useful for the more novices to feed the subconscious with the various ways in which the market can represent accumulations and distributions; but it is totally useless from an trading point of view as the confirmation of all this is done after the fact.

It would therefore seem more sensible, for the purpose of setting up trading scenarios, to focus on identifying the creation of a value zone (range) and to evaluate the price continuously as it interacts at its extremes in order to identify acceptance or rejection. The analytical tools offered by the Wyckoff methodology help us in determining who is more likely to be in control during the development of the range (buyers or sellers) and therefore in which direction the path of least resistance lies.

During the development of the moves, profiles will be generated and two very common ways in which trend and sideways behavior is graphically observed are the b and P patterns.

These patterns represent the first three phases of market activity that Steidlmayer presented in his first studies and that by Wyckoff methodology we identify as Phases A and B of the development of structures.
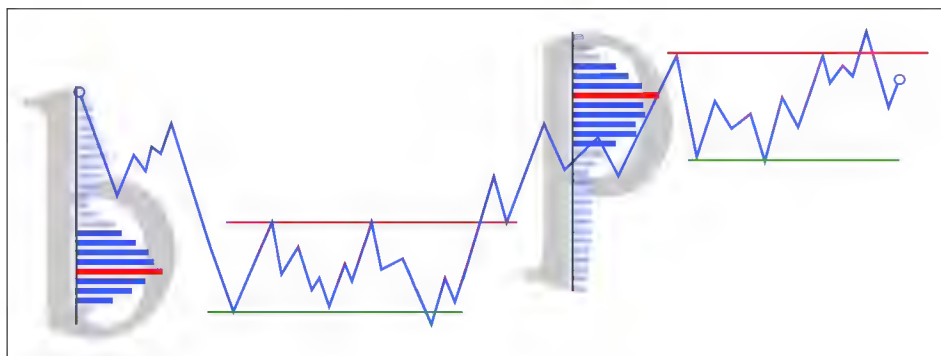
These patterns will alert us to the halt of the previous trend movement as well as the new lateralization context. These two types of profiles show the same behavior but in both directions. Firstly, in the low price zone the price moves with a certain fluidity developing the trend movement until it meets traders willing to trade in the opposite direction. At that point an equilibrium range begins to develop, a zone of high participation that generates the profile bell.

As long as the price is during the trend movement, we should only be looking to trade in favor of that direction. We can rely on the developing VPOC and the rest of the operating levels.

5.6.1 P-SHAPE PROFILE

Characteristic of bullish movements and representative of future distributive and reaccumulation schemes.

This type of profile suggests strength on the part of buyers who have had the ability to push the price up with relative ease until it reaches a point where sellers begin to appear.
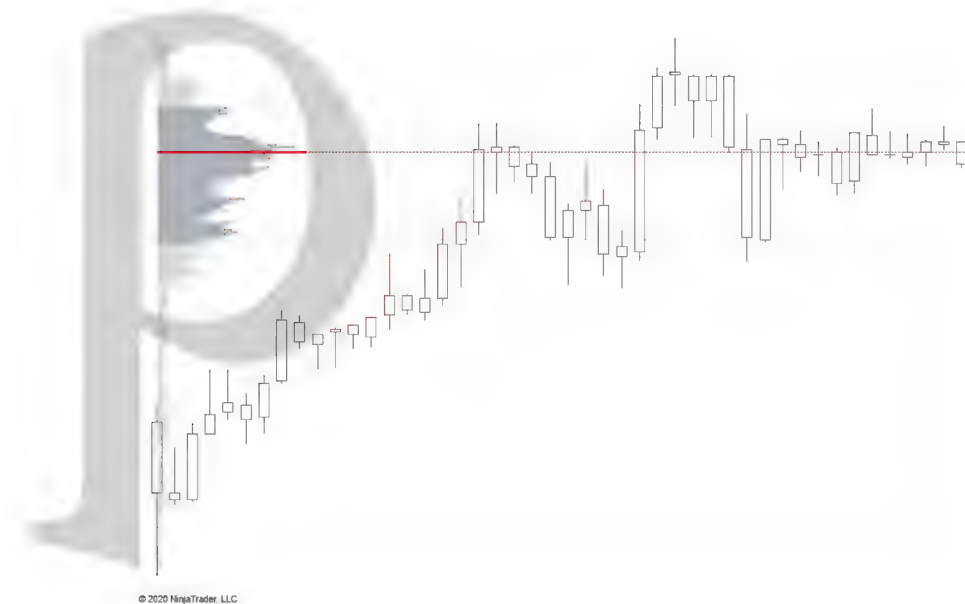
It is made up of two parts: a first one where the upward imbalance is observed and a second one where the market starts a rotation process (range). This is important to keep in mind because if such a process occurs in reverse (first a rotation and then a downtrend) visually we will still see a P-type profile with the big difference that it will have difficult trading validity.

All the concepts and tools that are being proposed have an operative sense; and in the case that concerns us with the P and b patterns they are only interesting if the last price action is the creation of new value (range) since it will be from there where the next profitable imbalance will be generated. That is, if we are at the end of the bearish movement at the point of having already identified the P pattern in mirror (with the imbalance to the right) completely, from the point of view of operating that imbalance we may be too late and the most likely thing is that the price will generate a new equilibrium zone as the most immediate action. On the contrary, if we have a theoretical P pattern (with the imbalance to the left) we will be able to take advantage of the subsequent trend movement (which may be upward or downward).

Besides looking at it in isolation (session profiles), it is interesting to know that a longer-term uptrend will be composed of several of these profiles in its internal development. In this case they will simply be reaccumulative patterns that give rise to the continuous upward development.

In case this type of profile appears after a prolonged downtrend, it could alert us to the imminent end of the downtrend at least temporarily. Here it is important again to note that it refers to see the theoretical P pattern; because if what we see is a mirror P pattern what we would actually have would be a distribution and therefore the downtrend would denote strength.

5.6.2 b-SHAPE PROFILE

Characteristic of bearish movements and representative of future

cumulative and redistribution schemes.

Individually, this type of profile signals an imbalance in favor of sellers. Sellers are in control and have pushed the price strongly downwards until finally some participants appear buying and a new rotation process is generated.
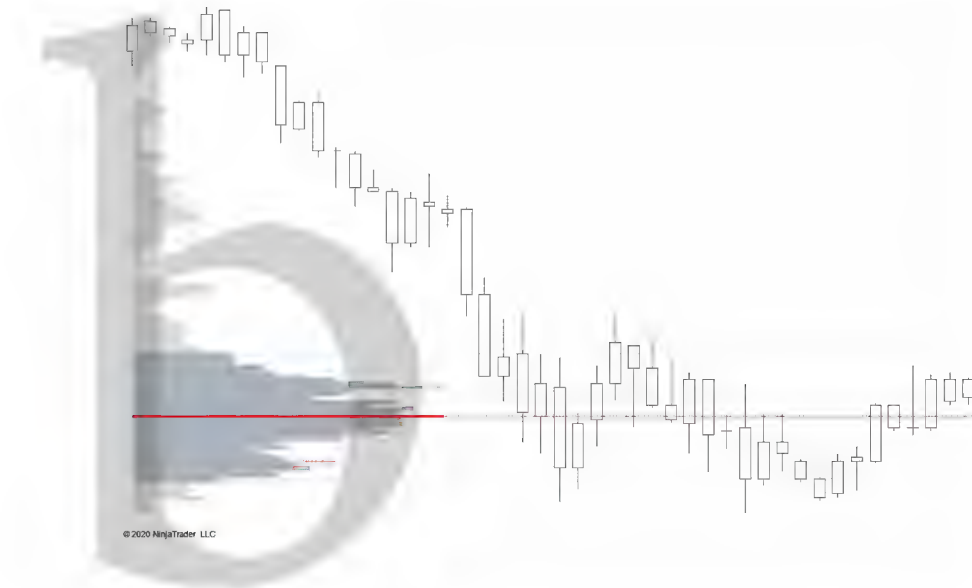
Within the context of a longer-term downtrend they will appear with redistributive character being excellent areas where to look for incorporation in the trend.

As with the P pattern, the theoretical type b is formed by a bearish imbalance as the first part and a value creation as the second. A rotation first and a subsequent bullish imbalance would also appear visually with a b-shaped profile but operationally we may not be able to take advantage of that first imbalance. On the other hand it would also not have the same implications when analyzing the health of the preceding uptrend, where what we are looking for is upside rejection and value generation below.

© 2020 NinjaTrader, LLC

In case of observing a b-shaped profile after a prolonged bullish movement, it could signal the end of such movement and sometimes the beginning of a new one towards the bearish side.

5.7 USES OF VOLUME PROFILE

This tool offers us totally objective information that fits perfectly within the context provided by the principles of the Wyckoff methodology.

Some of the most important uses we can make are listed below.

5.7.1 IDENTIFYING STRUCTURES

There will be occasions where the delineation of the ends of structures will not be very visual, possibly because the price action has generated unclean movements. In this context it can be very useful to use the Volume Profile to pinpoint the high and low zones of the value area (VAH and VAL) assuming this area as the range that is generating the cause of the subsequent movement.

By their very nature, the upper and lower limits of the structures we work with according to the Wyckoff methodology will always be low trading zones (LVN). The price turns that generate the creation of these supports and resistances are areas where the price has not wanted to trade

and are therefore identified as rejection. That rejection we already know is visualized within the volume profile as an LVN.

In addition, sometimes the natural ends of the structures (Creek and Ice) will coincide with the ends of the value area (VAH and VAL). By pulling a profile of that structure we will be able to observe how all price action contained within the range will be part of the value area.
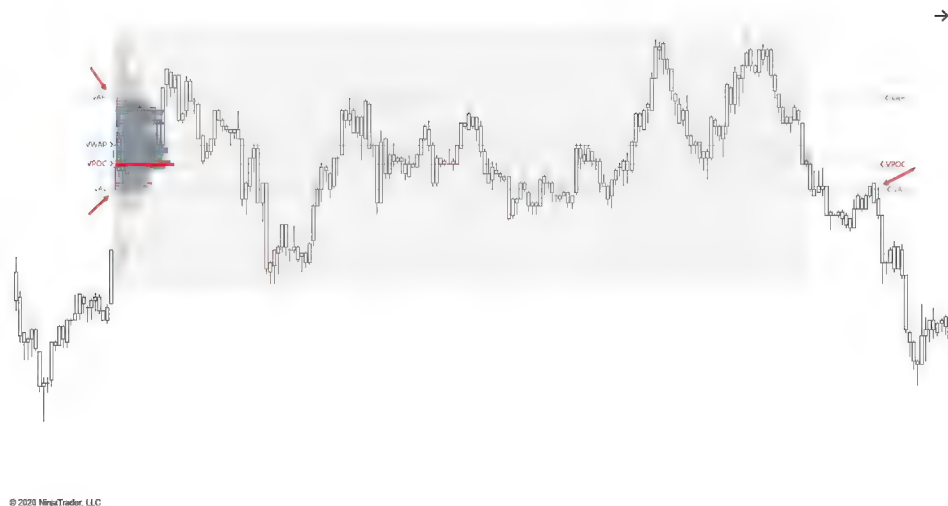
As can be seen in the chart below, the stop of the bullish movement does not show very clear price action where the stop events are genuinely visualized. If we are in the final part of the development of such a structure we could pull a profile of the whole structure to identify key levels by Volume Profile. In this case we see how after the final shock from above the price quickly crosses the entire value zone including the VPOC and VWAP. At this point we should be favoring the distribution and therefore the first scenario in short would be to wait for the test after breakout (LPSY) on any of the operating levels. The first of these levels to take into account would be the Value Area Low as it is the first that the market would find. We see how it made this test to continue the bearish development from there. The next and last level to look for the potential LPSY would be the VPOC of the profile.

In this other example something similar happens. Stopping events may not be the most visual and then there is the added difficulty of framing that bullish movement that leaves the value zone and then re-enters. The objective is that, if we find ourselves seeing an imbalance after the development of a structure already with a certain maturity, we can launch a profile to identify the operating levels on which to expect the price to develop the test looking for the continuation of the movement. Again we see how after the breakout movement, the test is done just above the end of the value area of the profile, in this case above the Value Area High; it is the perfect area for the search of the long entry trigger.

© 2020 NinjaTrader LLC
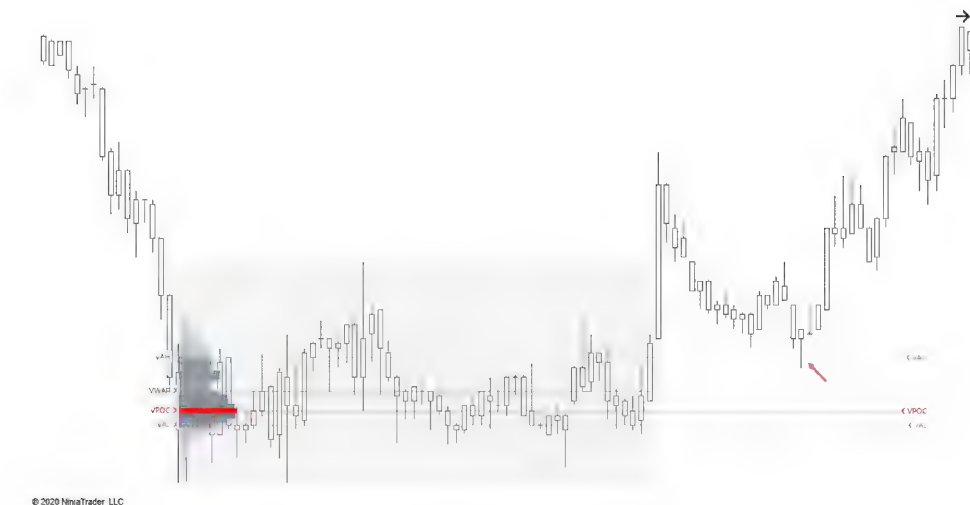
The **scope of the profile** should include all the price action from the time the rotation starts until just before the imbalance occurs. There are traders who may also include the breakout action within the profile, which is not to say that this is incorrect. Just keep in mind that from the trading point of view what we are looking for is that this test after breakout is going to look for some trading level of the previous accumulation/distribution and this would leave out both the imbalance and the subsequent movement to the test.

As we can see, most of the structures that develop in real time

markets are not as genuine as shown in the ideal book examples, plus they are all different from each other. But this does not mean that they are not tradable. This is where the levels provided by the Volume Profile tool come into play.

5.7.2 DETERMINING MARKET BIAS

BY ANALYZING THE TRADING ZONES

We will always favor trading in the direction of the last high trading node generated. And a scenario against this direction would only arise when the price has broken the zone that supported the last move.

If the price is above a high volume node (HVN) we will determine that the control is in the hands of the buyers and we will only raise a short scenario when the price crosses this zone from below, which will suggest that the control has changed in favor of the sellers.

The logic is that at these nodes the price returns to a state of equilibrium and we will not be able to determine in which direction it will move subsequently. Only after confirming the effective breakout of this zone would we be in a position to propose a scenario with some robustness.

Last High Volume Node of the upward movement

Up to this point in which it breaks down, we would only look for buying operations

From there, possibility to evaluate short sales in the test

© 2020 NinjaTrader, LLC

The above chart shows this concept very clearly. If we are in the final part of the bullish movement, above the last HVN, we should wait for a breakout before looking for a short trade. The profile has been drawn covering only the bullish movement (from 1 to 2), since what we are interested in knowing is where is the volume node that is supporting this movement. When this is crossed downwards we can suggest that the control has shifted to be in favor of the bearish and now we are in a position to propose a short scenario for example to the test of this HVN.

At this point you are already effectively positioned at the top

Last High Volume Node of the downward movement

Possibility to search for a buy in the test

© 2020 NinjaTrader, LLC

In this other example we have the same dynamics but in reverse. We locate the HVN of the bearish movement in force and the idea is to

continue favoring shorts until it is broken. Note, not until this HVN is broken, but the last one to be generated. That is, if the trend continues downward, we must continue to update the profile to identify where the last HVN is and only at the time of its break to the upside could long entry be considered.

It should be noted that not necessarily the HVN that determines the control of the movement must also be the VPOC of the profile. We will simply take into account the last one to develop, regardless of whether it is the VPOC or not.

BY ANALYZING THE OPERATING LEVELS

As a general rule, the most advisable is to trade with as many operating levels in favor as possible. That is to say, if I am considering a long trading idea, I will want to have all the trading levels below the price and vice versa if I am considering a short idea. This context will suggest that the market is unbalanced in that direction and that it is therefore the path of least resistance.

If in addition to this we have the possibility to evaluate the relationship between VPOC, VWAP and price, it will be one more footprint that will add strength to the analysis.

A relatively close VWAP and VPOC is a footprint that confirms the overall balance of the market. Possibly, price is in an extremely tight range and the only trading approach here would be to look for reversal at the extremes.

© 2020 NinjaTrader, LLC
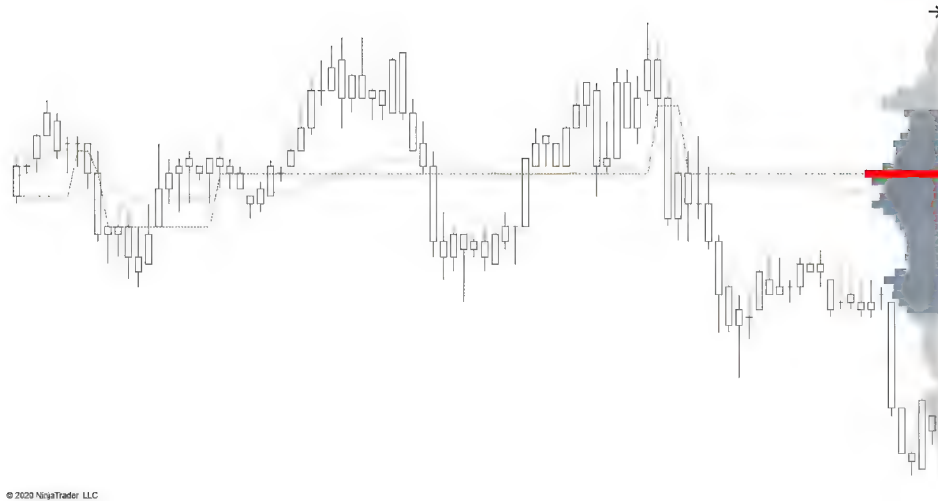
That is exactly what is happening on this day. The dark dotted line is the VPOC of the developing session and the orange dynamic line corresponds to the VWAP. Until a final imbalance to the downside occurs both levels remain relatively close and this generates constant fluctuations between them, causing a range day.

To determine an **imbalance** in favor of buyers we want to see the price above both the VWAP and the VPOC; while for control in favor of sellers we want to see the price below both levels.

© 2020 NinjaTrader, LLC
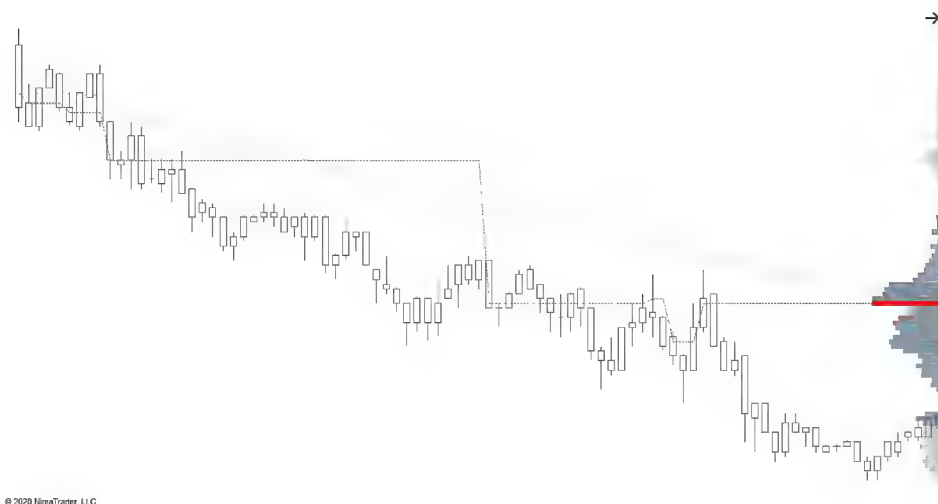
In this chart we see an example of clear bearish control where at all

times of the session the price is below both the VWAP and the VPOC, acting as resistance to originate new bearish movements.

The temporality to use in these operative levels, as everything, will depend on the trader. For an intraday trader the most advisable will be to use the levels of the previous session and of the current session. Longer term traders may find it more useful to use such levels on a weekly basis (weekly VPOC and weekly VWAP). Particularly being a structure trader, I find it useful to take into account the weekly VWAP in conjunction with the VPOC of the structure, thus eliminating the seasonality. It is a matter of taste and this configuration should be adapted to the trading style of each trader.
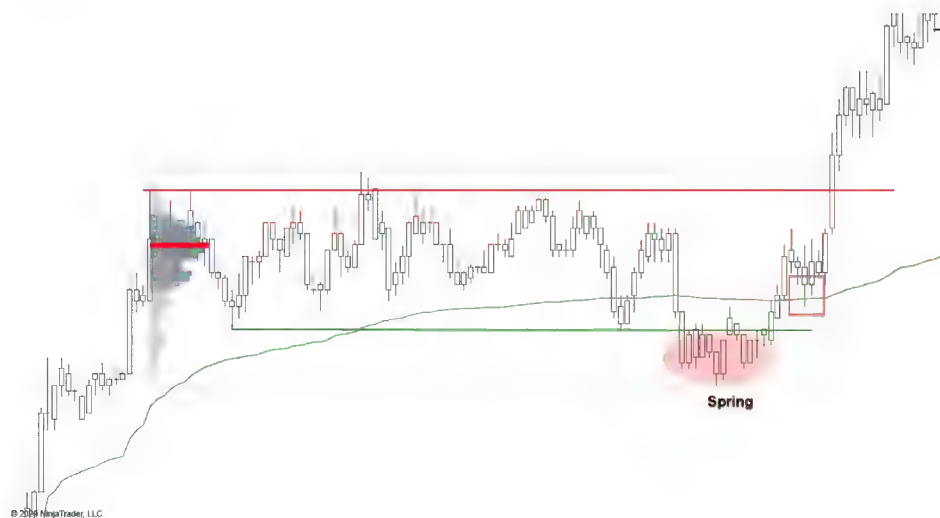
In this chart where we are analyzing a structure we could pull a profile of it and add the weekly VWAP (green dynamic line). It is a very good example to highlight the importance of the context above any other element.

If we see a potential Spring that manages to position itself above the VWAP we would be ready to look for a long entry. But if we look closely, the VPOC of the profile we would still be against the VWAP that

is marked. We are suggesting the possibility of trading in favor of the more operating levels the better, what do we do then? Context should prevail in cases like this. We know that VPOC is a very important balancing level, but we also know that the market will initiate an imbalance sooner or later; and that shakeout from below suggests to us the potential initiation of such an imbalance from the upside. In such a context we should assign greater relevance to the development of the structure above the VPOC.

We would have reasoned very differently if the price after the potential Spring had not even had the ability to move above the VWAP. That lack of strength would have suggested to us some bearish control and even an entry in the opposite direction could have been priced in seeing Spring's labeled move as a genuine bearish breakout event. Any action must be confirmed or rejected with subsequent price action.

That is just what we have in this example. In a potential Spring situation the price attempts to re-enter the range but is unable to position above the extreme of the structure, the profile VAL and the weekly VWAP. This is a sign of significant weakness that would lead us to treat such a pattern as distributive.

Spring?
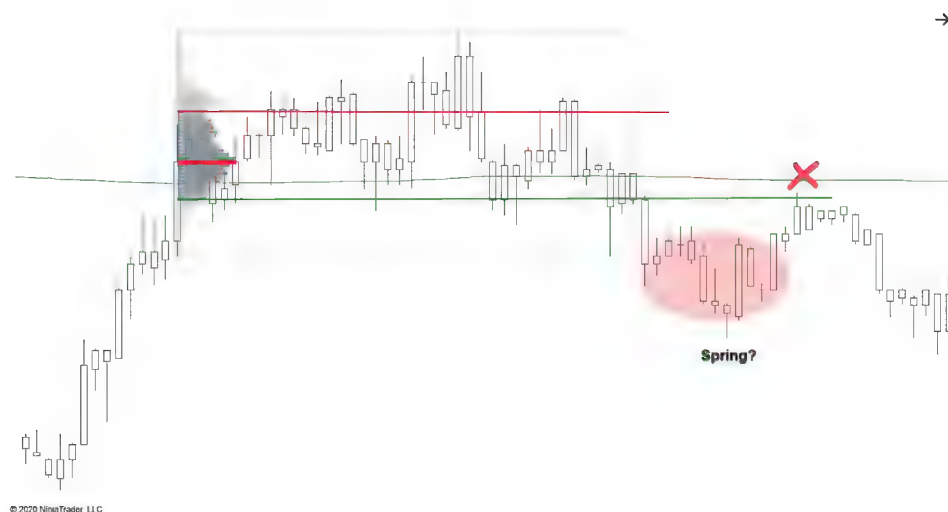
When working with different levels it is also important to keep in mind that we can use several timeframes in conjunction, for example, two VWAPs in weekly and monthly timeframes. This configuration is really interesting if we decide to analyze a longer term context.

5.7.3 ANALYZING TREND HEALTH

A very interesting footprint provided by the Volume Profile is the continuous analysis of the profile of the sessions. When we are observing a bullish movement, a symptom of the health of the movement would be to observe that the value areas (and therefore the VPOCs) of the sessions are generated higher and higher. This suggests that the value of the asset is being accepted in the new trading areas, it is reaching and therefore the trend is likely to continue. In this context of control by buyers, we should be looking for a pullback to trading zones predisposed to go long.

The same applies to downtrends. An unmistakable sign of its health would be to see that the value areas that leave the sessions are observed each time at lower levels, denoting acceptance of the price. In this scenario of bearish control, the most advisable thing to do is to identify areas of potential resistance to look for short positions.

Something that would alert us to the health of this movement would be to observe overlapping between several areas of value as well as to see that some of them are moving against the direction of the trend, losing the dynamics it had been carrying. We would already be observing a consolidation of the price and it could alert us of a change of character.

By Wyckoff methodology we could surely already identify a lateralization process and it would be interesting to start analyzing the traces of this structure in order to try to determine in which direction the next imbalance will occur.

This potential change in the perception of value is very clearly visualized with the P and b patterns. If the market is in the middle of a bearish trend leaving the value zones lower and lower and then suddenly a bP pattern appears, this could be the end of the bearish movement or at least a temporary halt. The fact that the market has developed this P pattern after the b pattern suggests a change in the perception of value. At least temporarily it no longer wants to trade at lower prices and we could even be facing the beginning of an uptrend.
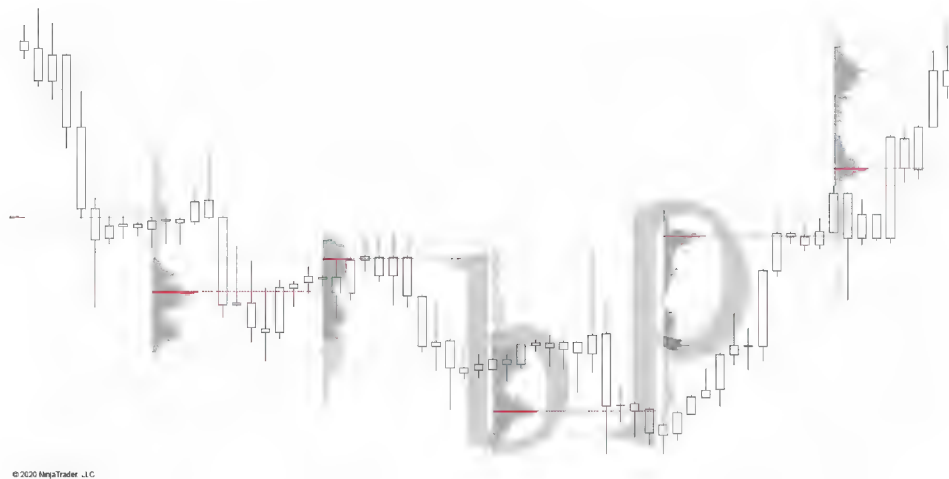
Rather than seeking to clearly observe the ideal pattern, what is interesting is the evolution of the value generation, i.e. the rotation of the Value Areas. In this example the participants have had enough capacity to generate value above the previous one and this alone should alert us to the health of the bearish movement and even put us on alert for a possible accumulation.

The same would be true in reverse. If we are looking for a bearish

market turn, a signal that would add strength to such analysis would be to observe a Pb pattern.
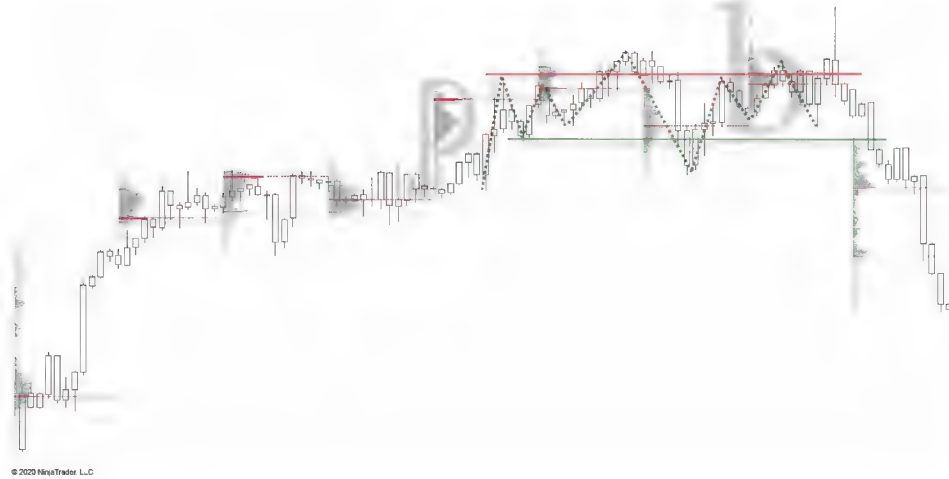
This example is a bit more complex and interesting to analyze. The first thing that is striking is that the pattern does not occur in tandem, but rather two sessions in between. On the other hand, we can see how profile b does not generate value below the Value Area of the profile

P. This is a real example; the market behaves erratically most of the time so looking for the appearance of perfect patterns can be a waste of time. It would seem more interesting to stay with the dynamics within them; what they implicitly suggest to us.

After the appearance of the P-type profile there is a change in character and the market begins a rotation process. The following two days the value areas are overlapped, showing the acceptance of these price levels by the vast majority of participants. Finally, the creation of the type b profile triggers the bearish imbalance. At that precise moment when the price is below the value area of profile b and after seeing all that has been analyzed previously, a short scenario could be proposed, seeking the effect of this potential distributive structure.

If we look closely at b, the imbalance does not occur at the beginning of the session as theory suggests, but rather in the last part of the session. The key is that this imbalance is rejected and re-enters the value area. In essence this is the implication behind the pattern: it makes no difference when the imbalance occurs as long as the price generates a rejection and re-enters the value area. For trading purposes what would be less interesting for us would be to observe the imbalance at the end of the session and whose close is established outside the value area.

Although the ideal in potential distributive schemes would be to observe first the rejection to continue rising plus the generation of value below the previous sessions, the appearance of this protocol in reverse (first the generation of value below and then the rejection to trade at higher prices) implicitly suggests the same reading of change in the perception of value.

In the end, all cumulative and distributive schemes implicitly carry this change in the perception of value; and to a greater or lesser extent these P and b turn patterns will always be visualized.

❖ A bearish turn with pattern Pb is nothing more than a distribution that will have a greater or lesser duration which has been confirmed with the generation of value in b and it is possible that lower prices will follow.

❖ A bullish turn with bP pattern tacitly is an accumulation whose change in the perception of value possibly gives rise to higher prices.

5.7.4 VPOC MIGRATION

The current level of the VPOC represents agreement by both parties on the value of the asset, but

What reading to do in the event of a VPOC migration?

This issue has brought many traders upside down as the reading it offers has two different points of view. On the one hand many advocate that this is an unequivocal sign of the health of the movement and therefore suggests continuity in the direction of the trend. Many others advocate the position that a turn in the market is possibly originating.

The only objective is that it represents a value zone where price has been accepted due to the high trading it has generated. The question would be to determine the meaning of this value migration, whether as a continuation or as a reversal.

Under the principle that every market action must be confirmed or rejected by its subsequent reaction, the key lies in evaluating the subsequent price action following the checkpoint migration. As a general rule, if we do not see a continuation in the direction of the preceding move without consuming too much time we should question the health of that move.

TRADING WITH VPOC MIGRATIONS

Since we cannot know in advance whether a VPOC migration will

make continuation or reversal sense, it is most useful to be prepared for both scenarios. To this end, we will develop two simple protocols in order to establish some general guidelines.

This section is focused on intraday trading, although the underlying idea is equally valid for application to any other time frame.

PROTOCOL TO FAVOR THE REVERSAL

1. **VPOC migration**. If the preceding trend movement is healthy, after the migration of the VPOC we want to see a new momentum develop without consuming too much time.

2. **Non-continuity**. If after the VPOC migration the price does not have the ability to continue to move in the direction of the preceding trend we would be in a position to at least begin to question the continuity of the move.

3. **Time consumption**. This is a fundamental footprint. The general rule of thumb is that the longer the price goes without continuing in favor of the preceding trend movement after the VPOC migration, the more likely a market turn rather than a continuation is likely to occur.If we want to look for the turn we will mainly observe that it starts to sideways consume a relatively large amount of time relative to what it was doing previously during continuations.

4. **The change of character**. If migration occurs, an excessive lateralization without the ability to continue in the direction it had and in addition now appears an impulsive movement in the opposite

direction we will be in disposition to raise an operative idea in reversion.

5. **Operative idea**. The first operative level that we will take into account to wait for the price and look for the entry trigger will be the end of the broken value zone. If it breaks below, we will wait at the VAL and if it breaks above, at the VAH. As a second level, the VPOC.
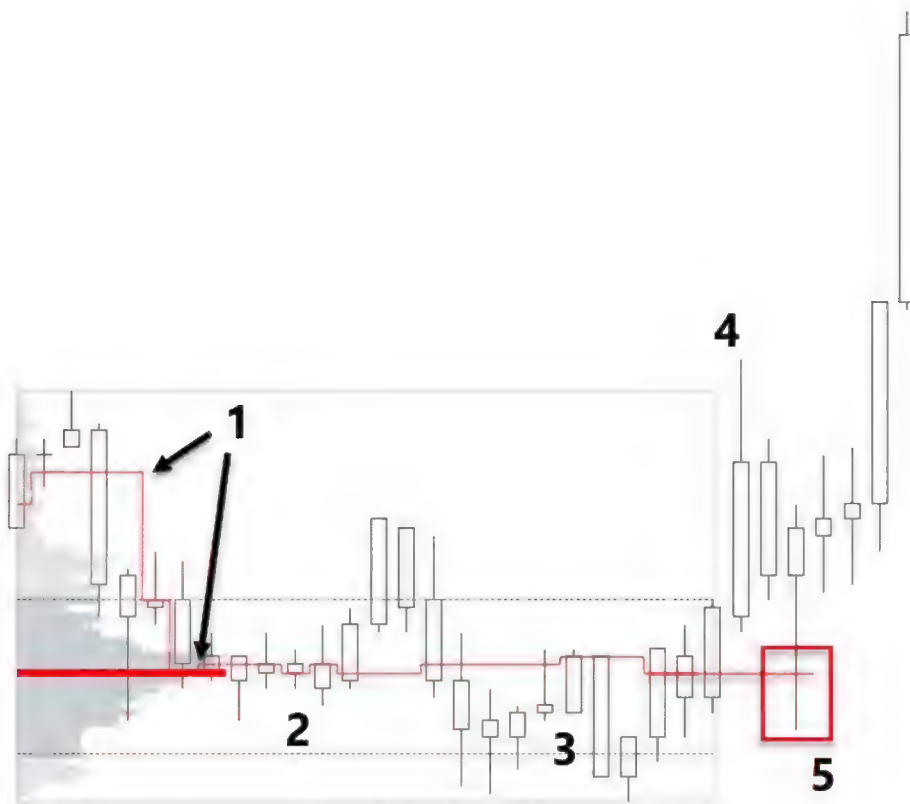
© 2020 NinjaTrader, LLC

In this example (Intraday reversal trade with pattern b) we have pulled a manual profile to see how the volume was distributed at that particular moment. We see that after starting the session the price falls and migrates the VPOC (1), then begins to rotate on it showing the non-continuity (2) and time consumption (3). Then comes the change of character with the upward imbalance (4) to finally go to test the old

VPOC zone (5), where we could be looking for the long entry.

We have to keep in mind that if we are trading with the profile of a current session it will continue to develop as the day progresses so that after the breakout, we may identify the level of the Value Area where we will wait for the price and then change its location. Although it is true that it would not be the ideal context, the same trading area could be maintained since from a logical point of view this is still a node of low volume and therefore an interesting area of potential rejection of the price. In addition, what the price is going to test is the previous accumulation/distribution zone, so leaving the profile of the range is totally advisable.
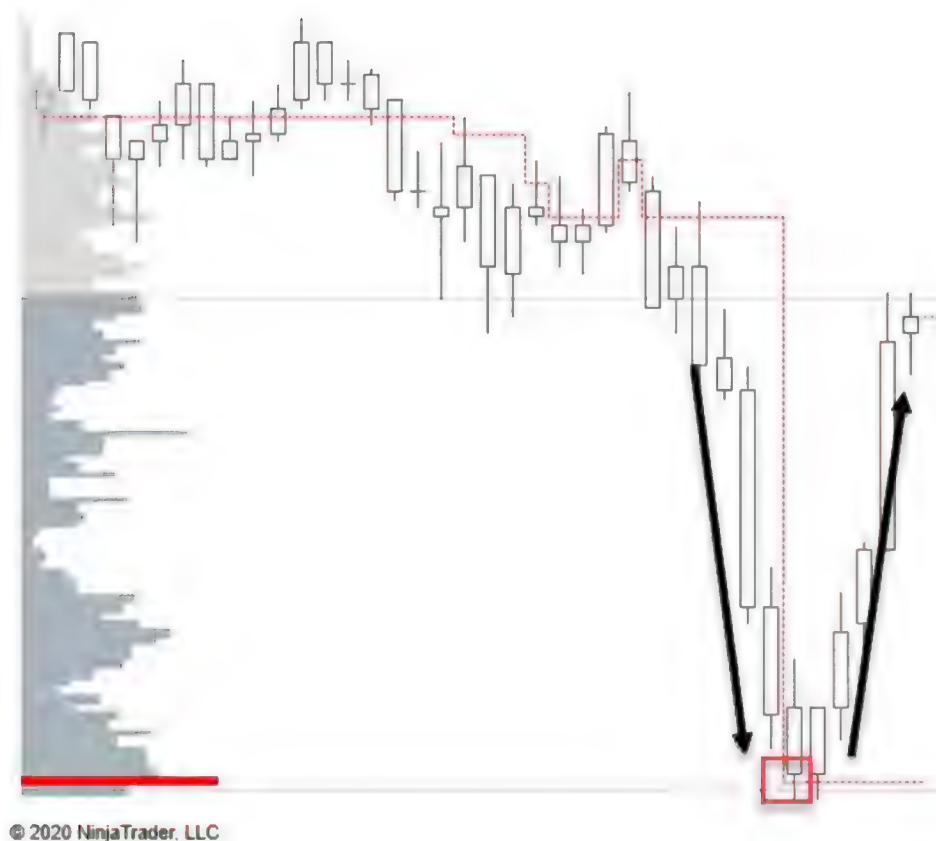
In this example we see what would be a VPOC migration with a reversal direction (we know this after seeing the subsequent movement)

but which does not follow the proposed protocol. When they do it with this urgency, with little preparation, it is practically impossible to operate. This is the problem with these V-turns.

The incorporation of this example is intended to point out that not all migrations with reversal direction will follow the proposed protocol, far from it. With this series of steps what we are trying to do is to objectify the turn and that it is based on the Law of Cause and Effect, since again this protocol does not cease to be cumulative/distributive processes.

In addition, it is a very interesting graph to deal with the concept of acceptance and rejection. By definition, a VPOC migration suggests new acceptance at those price levels. The objective fact at that precise moment is that more contracts have been traded (more acceptance) and therefore the migration has occurred. But what reading would it leave if it generates a total reversal of the movement? Well, again, objectively, what we see is that if the session finally closes away from those levels, such action remains as a rejection even if that migration has occurred.

The importance of the principle that every price action must be confirmed or rejected by the subsequent action appears again. In this case the first action has been the migration of the VPOC, but that change in value has been rejected by the subsequent reaction, which has reversed the entire movement.

If we recall, a change in the perception of value occurs when the variables Price, Time and Volume work in consonance. In this case we have the Price discovery movement, the Volume generation but the Time consumption that would confirm the Value fails.

<u>PROTOCOL TO FAVOR THE CONTINUATION</u>:

For intraday continuation trading the action protocol is much simpler:

1. **VPOC Migration**. Generally when the market intends to continue in the direction of the preceding movement, after the migration of the VPOC the price will start the new momentum with some speed. The urgency to continue moving in that direction will cause relatively little time to be consumed before continuing in that direction.

2. **Trigger search**. We are therefore ready to enter the market. It is simply a matter of waiting for our setup to appear before entering.

In the example we see that on the third VPOC migration the price instead of continuing upward reverses downward leaving that price action on the left as distributive. Thereafter the subsequent migrations make continuation sense as they are followed by bearish impulses with relative alacrity.

Although this type of trade has been presented on an intraday basis, during the course of a session; it may appear on the chart at different times and the underlying idea will remain the same. It may develop over the course of a single session, form over more than one session, or even develop as a longer-term structure. Regardless of its duration, the underlying logic is exactly the same.

5.7.5 CALIBRATION OF POSITION MANAGEMENT

The levels to use will depend on the type of profile used based on your trading style, but generally speaking the logic will be exactly the same for all of them:

- ❖ **Entry**. Regardless of whether we are in a trend or range context, the identification of the operating levels, mainly the VWAP, VPOC and high and low zones of the value area (VAH and VAL) will be extremely useful for us to wait on them the development of our market entry trigger.

- ❖ **Stop Loss**. For the establishment of the stop loss we want to identify areas where there has been a previous rejection; and these are the areas of low trading or Low Volume Nodes. The price generated a turn on them and we expect that in the future they will behave in the same way; therefore it is an excellent area to place our stop protection. In addition to the LVN, the more operating levels we have in favor, the better.

- ❖ **Take Profit**. For the establishment of take profits we are going to look for zones of high previous negotiation. As we have already mentioned, high volume nodes (HVN) produce certain magnetism in the price and therefore are excellent areas for the location of targets.

5.8 TRADING PRINCIPLES WITH VALUE AREAS

Regardless of the type of trader you decide to be and therefore the temporality and structures to use, these principles are universal with respect to the value areas of a given profile, be it that of a candlestick, session, movement or structure.

5.8.1 TRADING RANGE PRINCIPLE
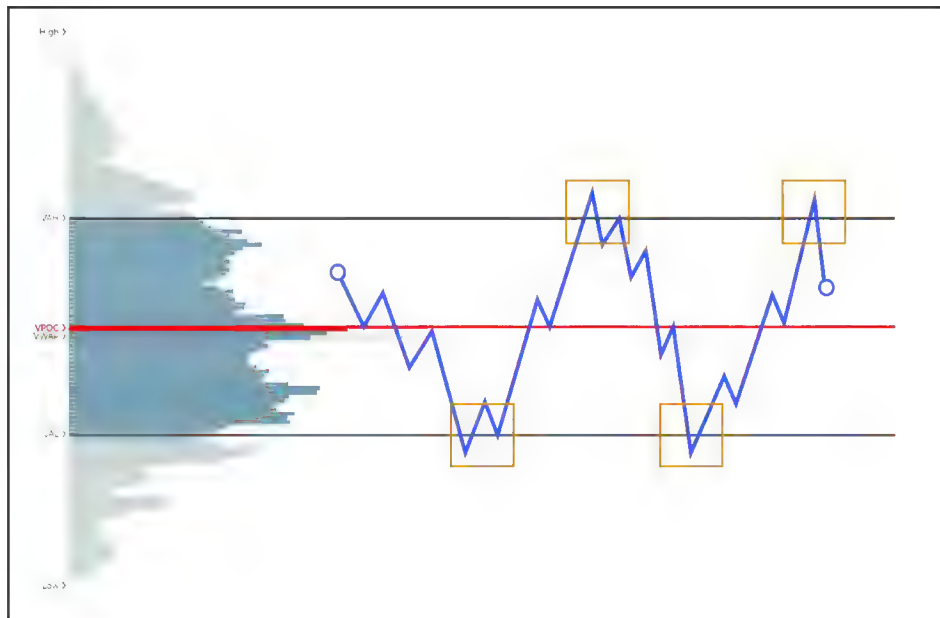
If the price is within a value area, as long as the market condition does not change the market is likely to continue to generate value around the center point so the price will most likely be rejected when the extremes are reached. Buy low and sell high.

In the following chart we see a real example of the principle of range trading. It can be any asset or timeframe; what we do have to take into account is a reference profile to work on. For an intraday approach it is recommended to work on the profile of the previous session. For longer-term approaches, weekly profiles or Composite-type profiles that include more price action may be useful.

What is interesting in this case is that the price is within the previous day's value area, suggesting a balance in the market. With this basic idea, and as long as the sentiment of the participants does not change, any operative idea should be to wait for the reversal at the extremes of its value area, as seen in the chart.

The minimum target for this reversal at extremes is a test to the control zone (VPOC), with the most ambitious target being a move that completely traverses the value area and reaches the opposite extreme.

As always, the trades that will give us the most confidence will be those whose trigger is located in confluence on more than one operating level. In the example of the reversal that occurs on the VAL we see that the price also tests the weekly VWAP (green line) and a former control zone (DevelopingVPOC).

5.8.2 REVERSION PRINCIPLE
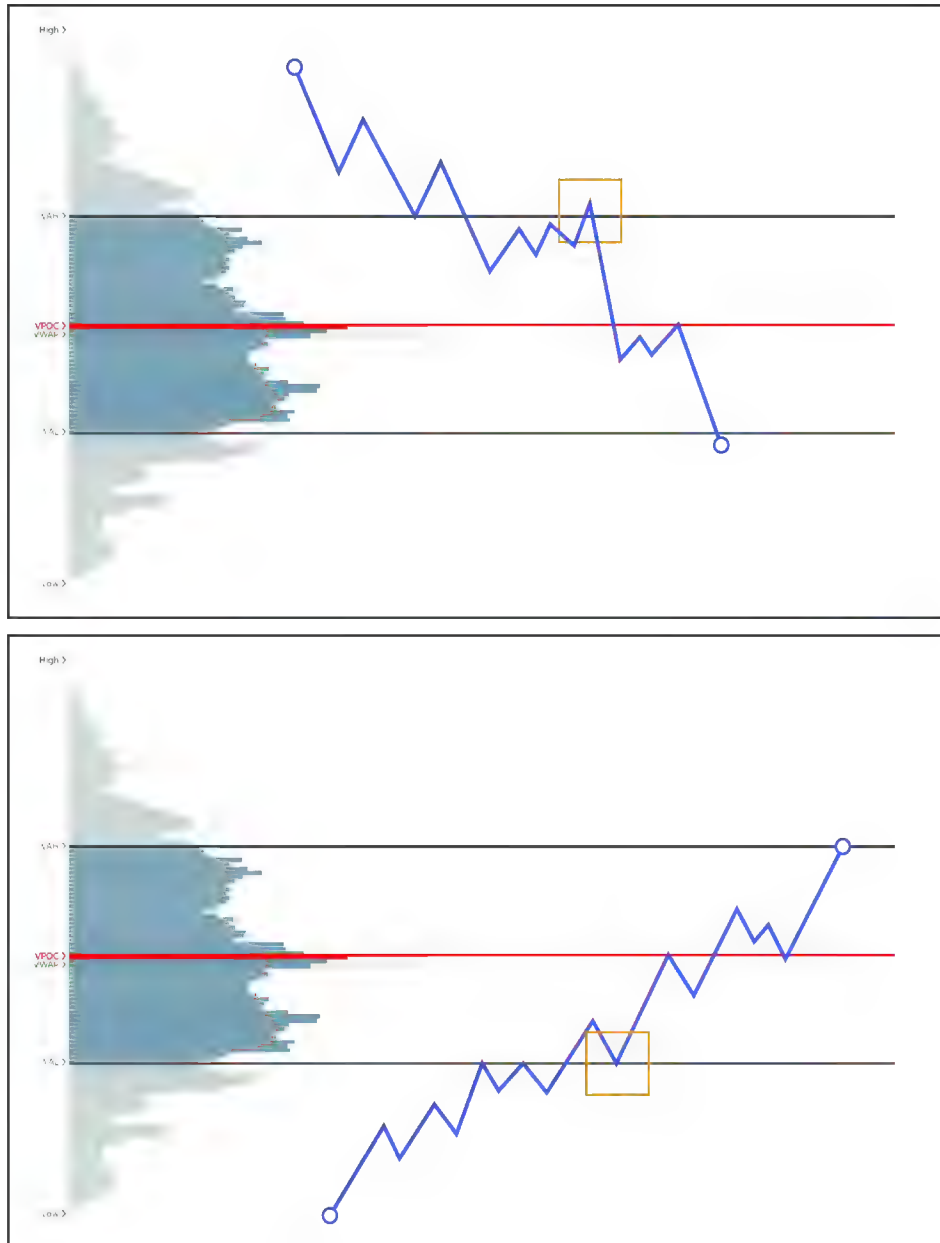
If price attempts to enter a value area and succeeds, it will most likely go to visit the opposite end of that value area. The market has refused to trade at those price levels so it returns to the previous value area. Adaptation of Market Profile's 80% rule.

This chart shows the opening of the last session away from the previous day's value area at the top, indicating an imbalance to the bullish side and therefore initially suggesting a buying control. This control must be confirmed by the acceptance of the imbalance and we see how at the moment of truth, in a position of potential bullish continuation above the Value Area High, the price fails, re-entering again to the previous value area.

This is a very instructive example to visualize the importance of keeping in mind both buy and sell scenarios in order to be prepared and react in time when the market tells us to do so. Initially in this case we would be looking for such a bullish continuation above the upper end of the value area; but seeing its inability and subsequent re-entry, the reading now is that the bullish price discovery has not been accepted and therefore the probability now is that the price will visit the opposite end of the value area.

After the initial re-entry, an inside test occurs above the VAH at the confluence with the weekly VWAP (green line) to initiate from there the bearish movement that runs through the entire value area. At this point the price returns to a condition of total balance evidenced by this continuous

bounce between the extremes of the Value Area.

5.8.3 CONTINUATION PRINCIPLE
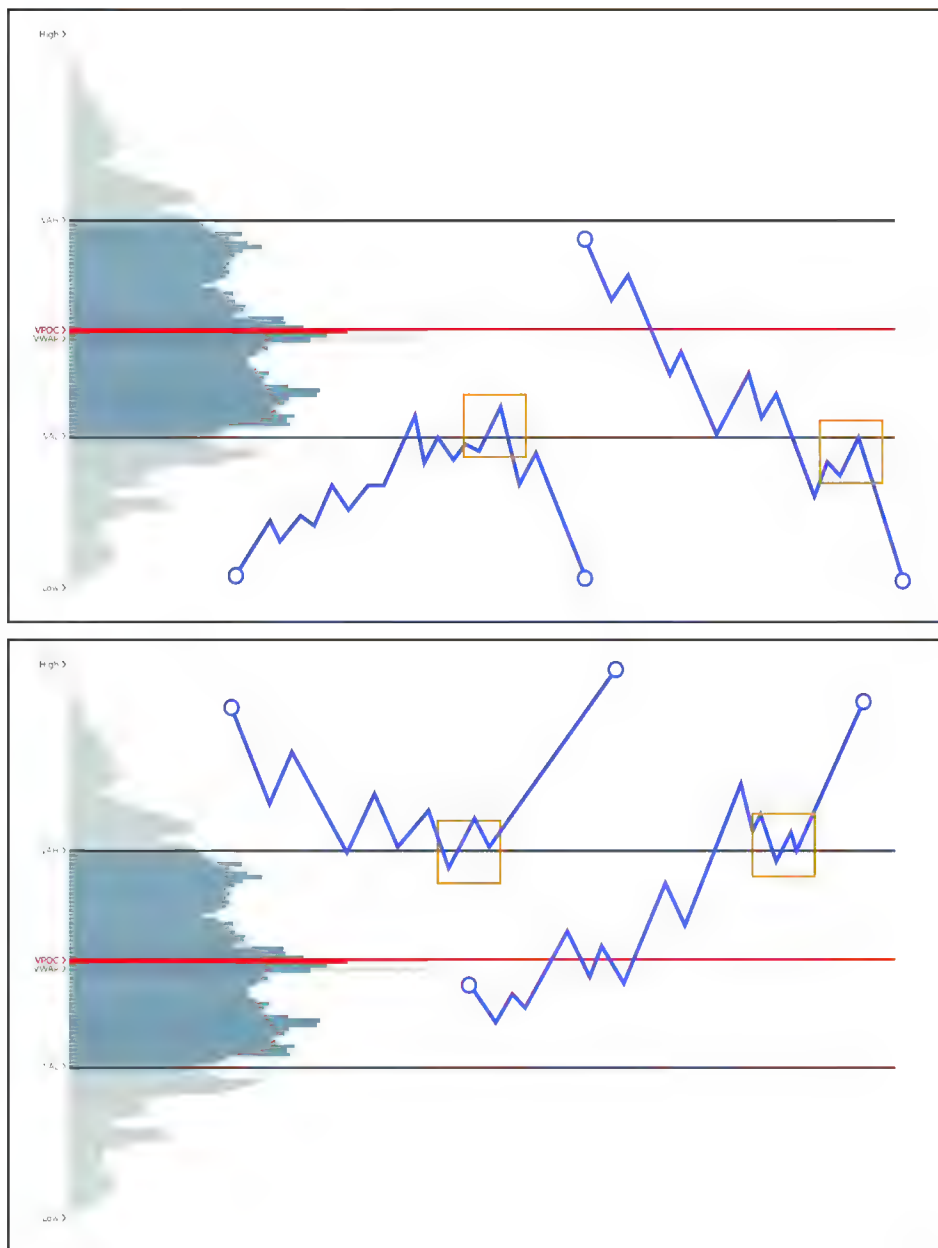
If the price tries to enter a value area and fails to do so by being rejected at the VA end or elsewhere, it will most likely initiate an imbalance in favor of that direction.

This is the test trade after a breakout. Price leaves a value zone and generates acceptance. This acceptance puts the direction in favor of the previous breakout as the most probable direction.

It should be noted that the price can come from outside that value area or from inside. The operating logic would be exactly the same.

In the following example we see on a real chart the development of this operating principle of continuation in its variant in which the price comes from outside the working profile.

The opening occurs above the Value Area High of the profile, so the first interpretation we must make is that there has been an imbalance to the bullish side in which buyers have had enough capacity to move the price away from its last value.

With this basic reasoning in which the market seems to indicate that the buyers are in control, the first scenario approach would be to wait for

some kind of test before continuing with the development in favor of the imbalance, in this case to the upside.

The price opens the session and develops some lateralization and then goes to look for the VAH zone where it generates the bullish turn that could offer us a buying opportunity.

The most astute Wyckoff traders will be able to identify even a cumulative pattern from the beginning of the session, acting as a potential Spring of this structure. This is a very good example to visualize the importance of the context: in trading zones of purchase we want to see potential accumulations, as is the case here.

5.8.4 FAILED REVERSION PRINCIPLE
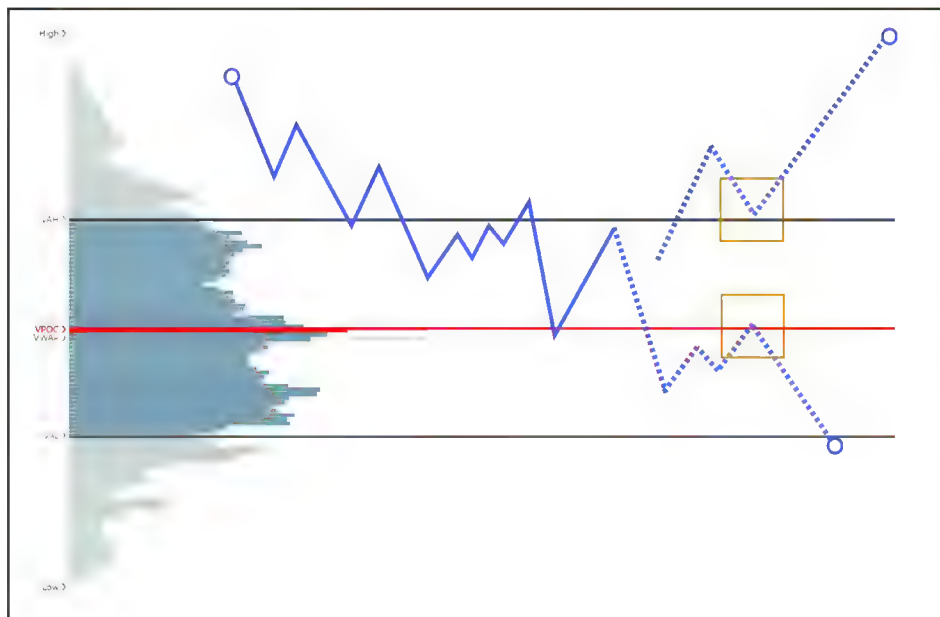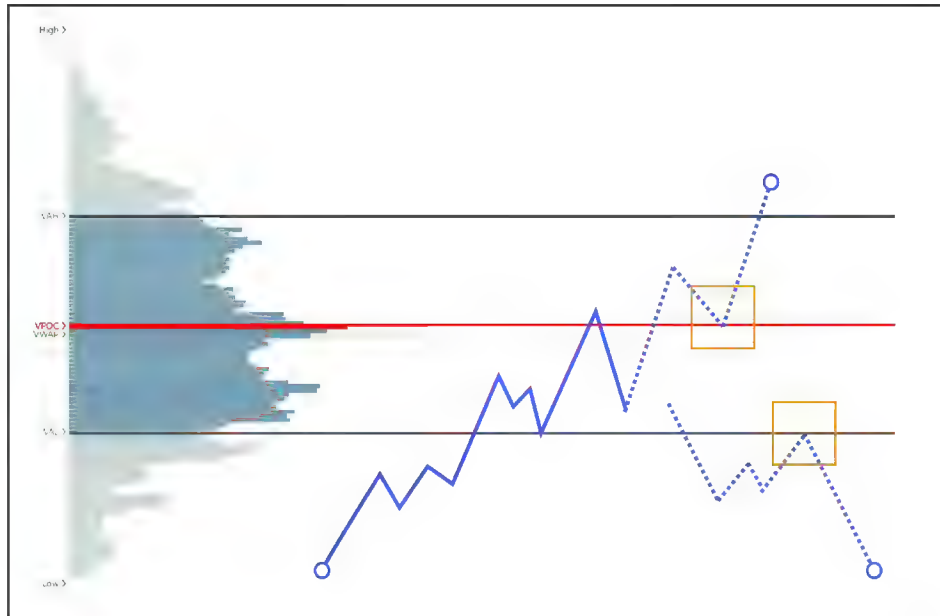
If the price tries to enter a value area and succeeds, but is strongly rejected at the VPOC of that range, the reversal trade would be cancelled until further price action is seen.

If it manages to recover the end of the value area, the continuation trade would be activated; while if it finally breaks the VPOC effectively, the reversal scenario would continue to be active with the objective of testing the opposite end of the value area.
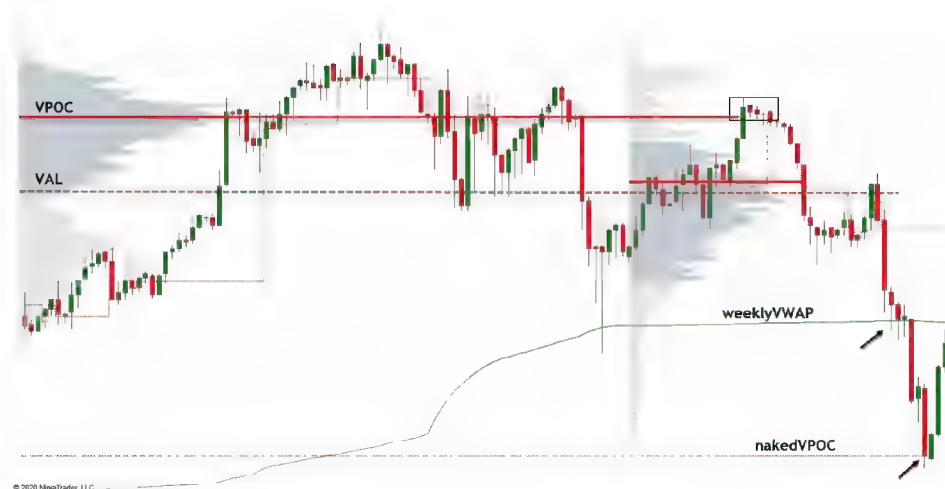
The session opens below the previous value area so the first

reasoning would be that the market is in imbalance and potential bearish control that would need to be confirmed.

At the first zone above which to wait for such confirmation of seller control (Value Area Low), the price overrides the scenario and re-enters the value area, triggering the reversal trade. As we will see below, any trade should be managed upon reaching the first relevant trading level; and in this case, a potential purchase on the VAL should necessarily be managed on the VPOC of the previous session.

After reaching this level, sellers appear, unbalancing the market again and provoking the development of a strong bearish movement. This aggressive reaction pushes the price out of the value area again, changing the market sentiment again and triggering at that point the failed reversal plus bearish continuation trade variant.

Now it does develop a successful test above the Value Area Low to initiate from there the bearish movement with possible targets at the weekly VWAP and at a nakedVPOC below.

5.8.5 SUMMARY TABLE OF THE OPERATING PRINCIPLE WITH VALUE AREAS

Continuation
Principle

Reversion
Principle

Trading Range
Principle

Trading Range
Principle

Reversion
Principle

Continuation
Principle
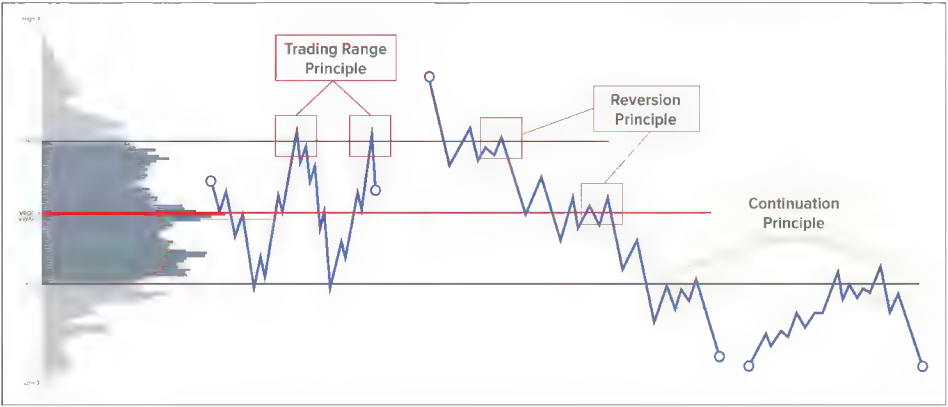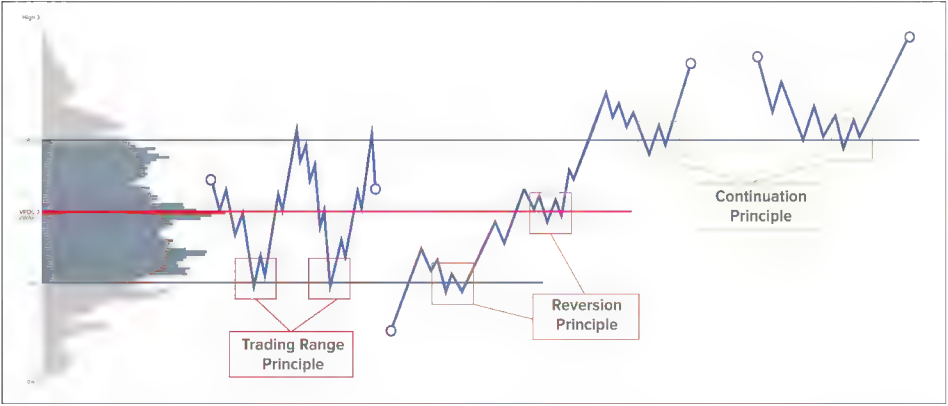
PART 6. ORDER FLOW

Once we have a thorough understanding of the subjectivity involved in order flow analysis we come to the moment of further reasoning to see if it is really useful to use it.

In general, the only time when it would be useful to look at the chart and look inside the candlesticks to analyze the order flow would be when the price reaches the trading zones where we are looking for the imbalances we expect to enter the market (it is all subject to the context).

Being aware that the matching of orders has different intentions behind it, what we are looking for in these imbalances is the entry of large traders with the intention of taking risk, speculating, opening positions in favor of one direction or another. We will never know for sure if what we are really observing are directional orders and that is why we must limit the use of this tool only on key operating zones.

As we have already seen, footprint analysis can be done in different ways based on the representation protocol. I particularly find it more visual to observe the graph using a configuration known as Volume Ladder. This type of footprint allows to observe the number of contracts executed in the different columns (BID x ASK) while making a representation of the volume traded at each price level within the candlestick in the form of a histogram.

6.1 FOOTPRINT READING
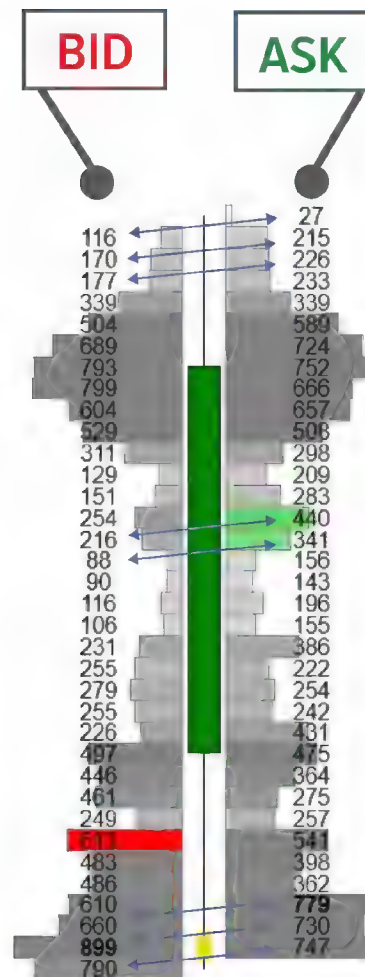
The first thing to be clear about is that the reading of the order flow is done diagonally and not horizontally. This is due to the very nature of the market in which participants can trade in different ways.

Buyers can participate either passively by leaving their demands on the BID or actively by attacking the ASK. Sellers can enter either by placing their bids at the ASK or by assaulting the BID with orders to

market.

Participants therefore have two prices at which to trade: the BID and the ASK. There is no single price at which all participants can trade at the same time. If there were, it would make more sense to analyze the footprint horizontally rather than diagonally.

That is why to assess the existing strength or weakness among market participants at a given price level we will always compare orders executed diagonally upwards: one level of the BID with respect to a higher level in the ASK column.

6.2 IMBALANCES

A large part of the key actions that we try to identify in order flow analysis have to do with unbalances. This behavior is composed of high trading (high number of contracts traded) in one of the columns and at the same time low trading in the opposite column (diagonally).

It should be noted that this unbalance should meet certain minimum parameters to be determined as such. The fact that there is simply a higher volume than in the opposite column is not enough, there needs to be a disproportionate difference in volume. And this difference can be parameterized by configuring the platform to show such unbalances when there is a 200%, 300% or 400% disparity between the levels to be compared. This means that 2, 3 or 4 times more volume has been traded on a column than on the opposite column.

Many traders also add a minimum number of contracts to calibrate the imbalance. If you have a deep knowledge of the market you are working in this filter will help you to refine the identification of such imbalances even further.

Using these rotations in percentages allows the analysis to better adapt to market conditions and adds some confidence as they are

objective values.
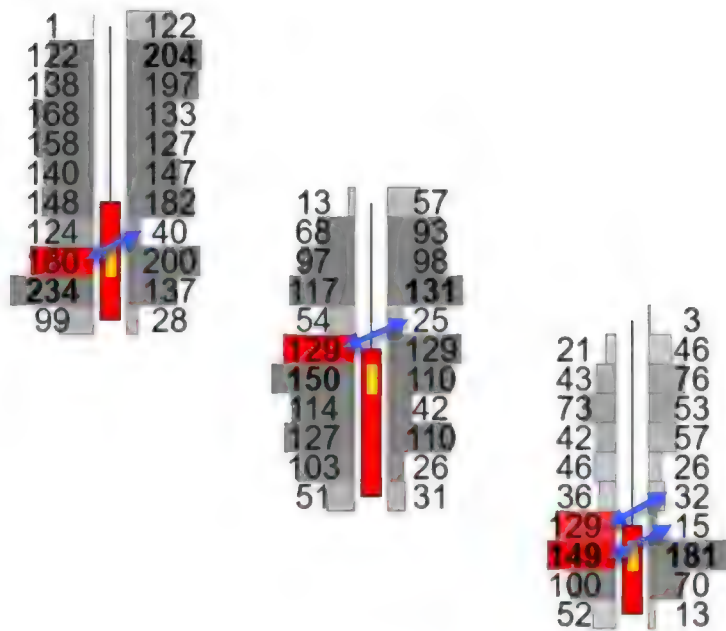
In this example chart we see imbalances in favor of the BID with a difference of 400%; in other words, 4 times more contracts have been traded in the BID than in the ASK in relation to the diagonal opposite level.

The analysis to detect possible imbalances is carried out by propinquity nature in comparative terms for two reasons:

1. Because it takes into account the level of the opposite column to determine that there really is an imbalance.

2. Because it will depend on the volume traded on that particular candle. Had such an action occurred at another time (where generally higher volume was traded) it might not have been seen as such an imbalance.

6.3 TURNING PATTERN

Order flow analysis involves many concepts. In an attempt to simplify and try to objectify its reading, and since we are only going to proceed to its analysis in potential trading situations, we will be looking for the events that suggest an effective market turn: potential takeover and initiative.

ABSORPTION

This is a blockade through limit orders. There are large traders who do not want the price to move further in that direction and initially enter through passive orders to cause the movement to stop.

What is interesting is to see that after this high trading the price has little or no movement in that direction. Sometimes these processes will take longer and large traders will be forced to take such action repeatedly over a price range, visualizing possible takeover over more than one footprint.

Potential buying absorption   Potential selling absorption

When determining a potential absorption we initially want to see it appear on relatively high volume. This will minimize the possibility that we are at the wrong time in the market where no such action is actually taking place.

On the other hand, although the color of the candlestick is indifferent, its closing price must be against the imbalance. To treat such behavior as potential takeover buying we want to see the imbalances remain above the closing price; and below the closing price for the example of potential takeover selling. This is the greatest demonstration of blocking and refusal to move further in that direction.

As with any other market action, it is confirmed or rejected by the subsequent reaction. If we observe high volume, a potential takeover and the inability of the price to continue moving in that direction, the odds increase that we are actually looking at a takeover.

Although such takeovers may appear leaving wicks, this is not a

necessary characteristic as they can also appear on candlesticks that close at the same end. The key here is to see that the price does not subsequently continue in that direction.

Initiative

As we have already mentioned, the execution of passive orders alone does not have the ability to move the price, aggressiveness is needed.

If the analysis is correct and we are in the right place, after seeing a possible takeover, the appearance now of initiative will be the definitive signal to confirm the market turn we were looking for.

Potential initiative buying   **Potential initiative selling**

This initiative is represented as large trades executed with market orders on the column in which we are looking to enter the market: If we want to buy we will look to see aggression in the ASK column and if we want to sell we will look for aggression in the BID.

Again we quote the principle that every action must be confirmed or rejected by the subsequent market reaction. If we see a possible initiative which is followed by a subsequent and immediate price move in that direction, we will be in a position to confirm that action.

This initiative, this large volume executed will be very easy to identify on the trace as the imbalance with respect to the rest of the levels of that same period will be very evident. Some authors use this term to refer to several imbalances together. While it is true that the more imbalances we observe, the stronger the approach will be, the configuration of the imbalance greatly influences its representation since it is not the same to configure the software to show imbalances of 400% than 150% where the latter will appear much more frequently.

As with the takeover, we must take into account the volume traded on that candlestick. In order to add confidence to the reading, we want to see that the volume is relatively high.

Unlike the takeover, in case of the potential initiative we want to see that the closing price is in favor of the imbalance; that is, in case of a buy initiative we want to see the imbalances in the lower part of the candle; and in the upper part in case of a sell initiative. This trace suggests to us that there is harmony between that action and the subsequent and immediate price movement.

In essence this candlestick that denotes initiative is the same as the SOS/SOWbar that we work under Wyckoff methodology, and should therefore comply with their common characteristics::

❖ Relatively high volume.

❖ Wide range.

❖ Close at the extreme.

Sometimes such a market turn pattern may be observed in one or two candlesticks (V-turn). At other times, after visualizing a possible takeover, the market will need more time consumption before the initiative appears. In the event that the market needs to consume that time before the actual turn occurs, what we want to see to add strength to the takeover idea is some sideways movement of the price where we can see the inability of the market to continue in the direction it was going, this is a very evident sign of the takeover action at times.

Another interesting detail that would add strength to the reversal pattern is if the market leaves a finished auction at the end. This would signal to us the refusal of traders to continue trading in that direction and such lack of interest would facilitate the turn in the opposite direction. If we are not able to identify the finished auction through footprint analysis, we can use the Volume Profile as we have already seen.

6.3.1 BEARISH TURN PATTER: BUYING ABSORPTION AND INITIATIVE SELLING

If we are currently waiting for a bearish trigger to develop, we will look to the left of the chart in order to identify any traces that suggest possible aggressive takeovers.

As we have already seen with order crossing, aggressive buying crosses with limit selling and this interaction appears in the ASK column.

Therefore, what we want to see as a sign of possible takeovers are large trades in the ASK column on or near the trading area.

But not just any location of these large trades would not be enough, the ideal would be to see them on the top of the candlesticks because in case that really big traders want to enter with limited sales, these will be at a high price level (buy low and sell high).

This possible takeover alone is not enough to enter the market. We need to see aggressiveness that suggests selling intent, and we identify this with the appearance of large trades in the BID column. This BID trace is objectively the execution of aggressive Sell Market orders and given the context in which we find ourselves, we could interpret that the origin and intentionality of such orders is to enter the market directionally by adding selling pressure.

The ideal location where we want these large trades to show up is over the top of the footprint. If in addition to this we see a subsequent downward price movement, we would be facing another footprint that would suggest the aggressive entry of sellers, visually and by methodology it would appear on the chart as a Sign of Weakness bar (SOWbar).
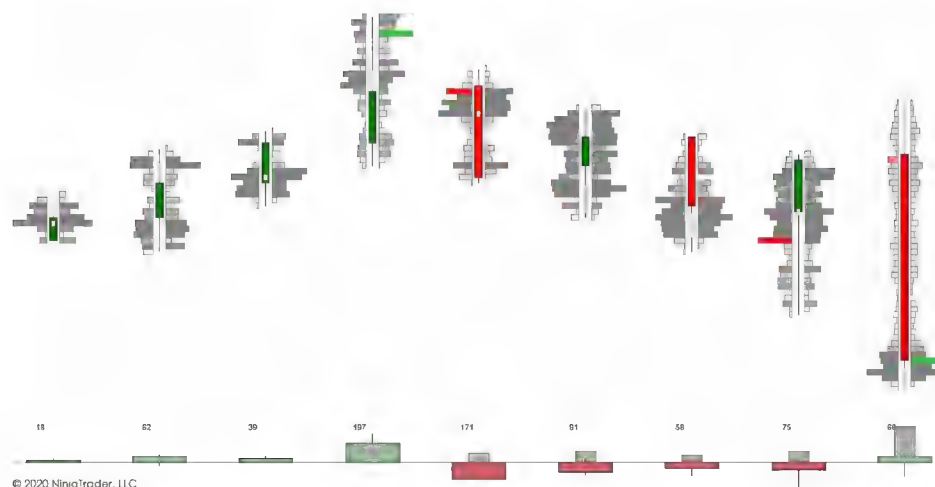
In this example we see how this pattern of potential takeover of purchases plus sellers initiative appears during the development of two contiguous candlesticks. It would be the exact theoretical representation of what we are looking for: an approach to the trading zone with a move that denotes lack of interest, a quasi weather action where ASK imbalances occur on the high side of the candlestick, followed by a candlestick with BID imbalance also on its high side that achieves some downward displacement and closes at candlestick lows (SOWbar). We also see a significant rotation in the Delta from +197 to -171, suggesting a change of control in favor of sellers, confirmed by the subsequent bearish reaction.

6.3.2 BULLISH TURN PATTERN: SELLING ABSORPTION AND INITIATIVE BUYING

In a context of waiting for the development of the bullish trigger, we will be looking for traces that suggest a takeover of sales. Conversely to the above, this takeover should show up as strong activity in the BID column. Takeover is a simple blockade where in this case the price is not allowed to fall. All sell orders assaulting the BID are matched with buy limit orders making it impossible to move the price down. This is a very important footprint of professional accumulation.

With respect to the location of these large trades we want to see them at the bottom of the footprint as a true reflection of the blockade. If we see those huge volumes at the top it would make little sense to think

about possible takeover selling.

Subsequently what we want to see is buying initiative: aggression to the ASK suggesting the intention to enter the market directionally driving the price up. We want to see these imbalances remain below the closing price of the candlestick, which will suggest that this aggression has had some continuity to the upside.

In essence a SOSbar is exactly that, aggression by large traders who get a large price move. The difference is that through candlestick analysis we see the final representation and not the order crossover that occurs within it.
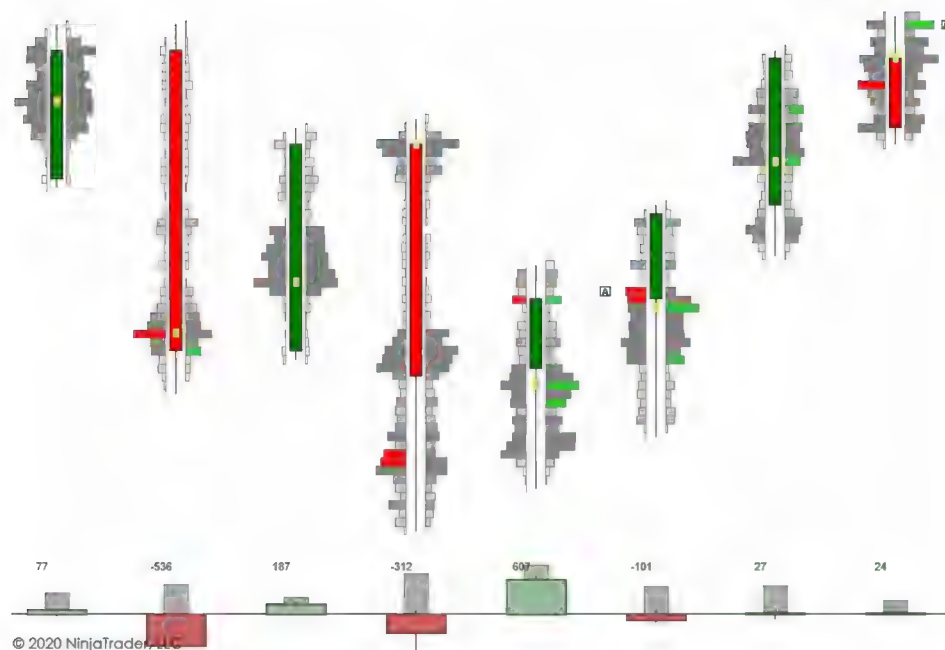
Here is a genuine theoretical chart of a bullish reversal. If we look at it, before the turn we can already see a potential takeover on the candlestick that marks a -536 Delta. It is a very good example to highlight the importance of the Delta. After that -536 is followed by a bullish candlestick, this is a first indication that we are possibly facing a takeover

because if the executed there were really aggressive sales, the price would have continued to fall. Instead, the price reacts by rising; but this bullish candlestick does not have much commitment behind it since on the one hand it does not leave any imbalance to support its movement, and on the other hand the delta is not very significant in relation to what we have seen previously. Most likely the market is not yet ready to go up.

And that is when it develops the effective turn in a two candlestick pattern. New takeovers can be seen in that great first bearish candle which is accompanied by a delta of -312 to later appear a bullish initiative candle with imbalances in the ASK, a relatively high volume and a delta of +607 evidencing now a clear rotation in favor of buyers.

6.4 CONTINUATION PATTERN

The continuation patterns serve us mainly to confirm the directionality originated in the previous turn in addition to allowing us to identify points where to look for incorporation when a trend movement is underway.

This pattern is composed of two actions: the creation of the control and its subsequent test..

CONTROL

This pattern is the clearest signal of interest in favor of a direction. It is visualized on the track by imbalances. It is essentially the same as initiative with the only difference being that it occurs once the movement has been initiated.

Although we could determine a control with a single imbalance, it is advisable to wait for the appearance of at least two imbalances. The logic is that the more imbalances the traders are able to generate, the stronger the zone will be. Again, it must be taken into account that depending on how demanding it is to parameterize the software, it will

show more or less imbalances. For this reason, it is not necessary to confine oneself to theoretical definitions that are not totally objective. The fact that a single imbalance occurs instead of two or three together does not mean that this event cannot be treated as a control.

This is because the control action is not only about imbalances; other characteristics such as candlestick range, candlestick closing level and volume traded must be met.

We therefore identify a bullish control when we see imbalances in the ASK column on a candle with good volume that manages to close in the upper third of the total range. Preferably the further down the candlestick range the imbalances are, the stronger the stock.

Similarly, we identify a bearish control on imbalances (the higher the range of the candlestick, the better) in the BID column on a bearish candlestick with high volume that closes in the lower third of its range.

If we have not had the possibility to enter the turning pattern after seeing the takeover plus initiative, the creation of the controls will offer us a new possibility to join as long as there is still a considerable distance from the level where we will set the target.

The participants generating the pattern have had the ability to exceed in an exaggerated way the number of contracts traded aggressively with respect to the traders in the opposite column. This action is very relevant as this is not just a single, isolated imbalance, but they have enough momentum to create three imbalances in a row at different price levels.

If after seeing a reversal pattern we observe such an occurrence on the print it will give us greater confidence that we are positioned in favor

of the majority of the professional money.

Test to control

This is a move that is going to test a previous area where aggressive traders (controls) have potentially entered.

Controls naturally identify a strong zone where it is assumed that the traders who caused the previous imbalance will reappear again should the market revisit the zone.

That is the underlying logic behind that particular action. We are going to favor the fact that those traders are going to defend their position by not letting the price move against them, thus offering us a good opportunity.

So what we will be looking for is the development of a new reversal pattern over the zone. A zone that will encompass the price levels identified in the control. In this context, the takeover action may not be so remarkable since the big effort has already been made previously. What should be evident is a new show of initiative suggesting the aggressive entry of such traders defending their position. This should be the definitive signal to enter the market.

Sometimes such a test will develop very quickly on the next developing candle. This will probably be seen as a wick that denotes a lack of interest to trade in that area leaving a full reversal of the candlestick afterwards. At other times there will be a small extension in that zone where the price will temporarily appear to break it but

eventually reverses leaving a rejection. And there will be the occasional time when the test leaves it practically ticking. The key here is to keep an open mind and be flexible with respect to the representation of such a test.

A It should be noted that the lack of interest should be manifest in this behavior as in any other known test action under price and volume analysis. Clear evidence of this inactivity as we already know would be observable through relatively low volume.

© 2020 NinjaTrader LLC
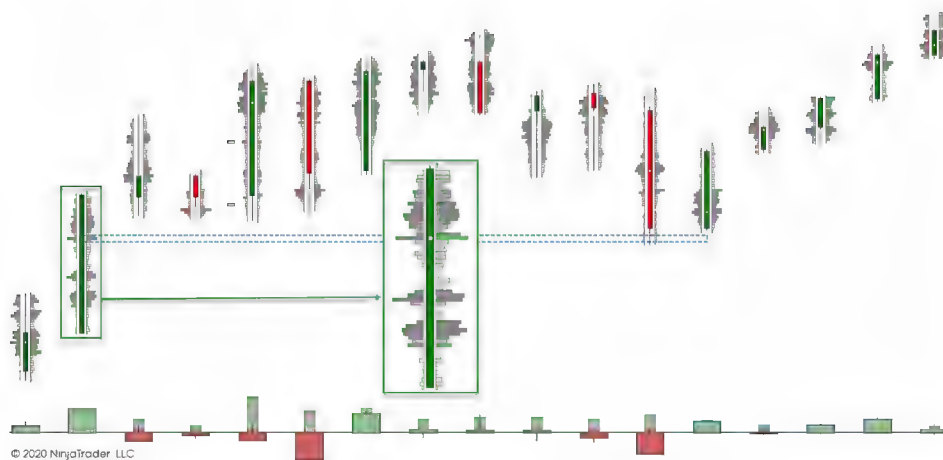
In this example the price comes from generating a bullish turn and is in the middle of the movement. The bullish control is created in this bullish candlestick with a wide range, good volume and positive delta. We identify the imbalance level that also coincides with the VPOC of the candlestick and we extend it to the right as a potential long search trading area. The price then pulls back above this level and generates a two candlestick reversal with good delta rotation. It is interesting to note how the bearish candlestick reaches this level with a decrease in volume denoting rejection and how the bullish candlestick subsequently generates a large volume leaving a new imbalance in the ASK. From there the price continues its bullish development.
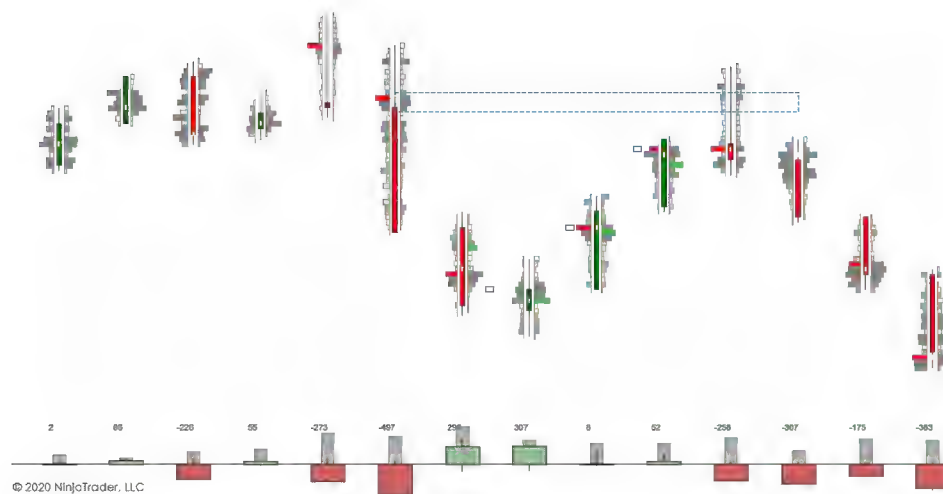
In this other example we see how the bearish control is generated on a candle with large displacement and high volume with a large negative delta suggesting strong aggressive entry of sellers.

If we look, the imbalance in the BID is generated along with other levels that have had a high trading so we can assume that area as a High Volume Node; and this will be the one that we will project in the future to look for the bearish continuation on it.

In this case the chart is 15 minutes so if we want to refine the entry we could lower the time frame to 5 minutes to look for the bearish reversal pattern: takeover of purchases and sellers' initiative. In case we want to continue maintaining the time frame, we would wait for the closing of the candle that tests this control to evaluate if sellers have entered again and our entry trigger is activated.

The key, as discussed above, ahead of two or more imbalances being generated together to treat such action as the control is that even if it is only one, it appears on a candle with a wide range, close near the extreme and relatively high volume as these are the traces that suggest to us the entry of large traders.

For the continuation pattern, we could also treat as the control on which to look for the test that initial imbalance that we identified in the initiation of the reversal pattern. Most likely it meets all the characteristics we are looking for so it would be the first area to project in which to look for the entry.

6.5 FRACTALITY

Although basically the reading of this type of pattern is intraday oriented, this logic can be extrapolated in the same way to higher time frames.

In the turning pattern observable in the Order Flow fingerprint, takeover and initiative is nothing more than a minuscule-scale representation of what in another temporality would be a cumulative or distributive scheme. The same turning pattern could be observed in a slightly larger perspective (during the development of one or several sessions) and would be visualized in the form of P and b, where the bell is nothing more than a takeover process within it, with the initiative being subsequently represented as the movement of the breakout of the value zone.

Assuming it on an even larger scale we would have the medium and long term structures composed from several days to weeks. These structures again represent exactly the same behavior, where the takeover process would be the accumulation/distribution range, and the initiative would be the trend movement albeit on a larger scale.

The only difference is the time consumption needed by the market to complete such a takeover process. In the following example we see

how in the chart on the left it develops in a three candlestick pattern; in the central one it does it during the development of a session; and in the chart on the right it needs to consume several days to carry out the process leaving a clearer structure.
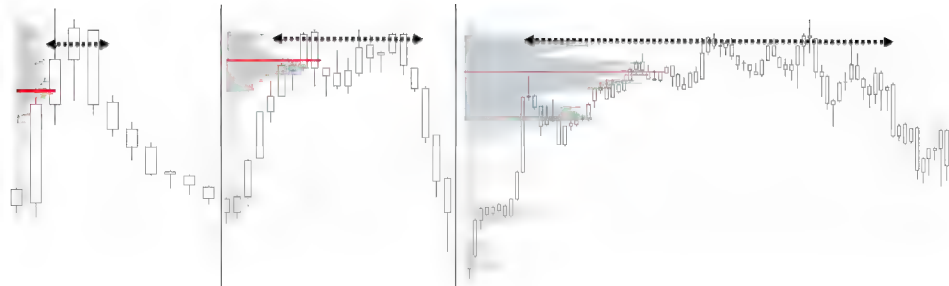
The same is true of continuation patterns. In essence a control will be part of an impulsive move while a test to that control will be part of a corrective move. This is the natural dynamic of trend movements: impulses and reversals.

Looking at it on a higher scale, such a control can be identified in the VPOC if we launch a profile over the entire impulsive leg. This VPOC would represent the control zone of the whole movement. That is why these are levels to be taken into account on which to look for the end of a possible retracement and the beginning of a new impulse.

And on a longer term scale, where we try to analyze the overall context, we assign the control function on the high volume nodes (HVN), which represent accumulation/distribution structures over other time frames.

In the following chart we see an example of this concept of fractality with controls. We launch a profile of the last impulse and identify the VPOC of that leg. This VPOC can be considered as the sellers control zone so a good strategy would be to try to go short in a future test of the zone. The key to understanding the concept is to be clear that if this

bearish momentum was part of a single candlestick, the most traded level within it would be that VPOC. We also see how this control is generated by a minor redistribution scheme which causes the creation of the High Volume Node.
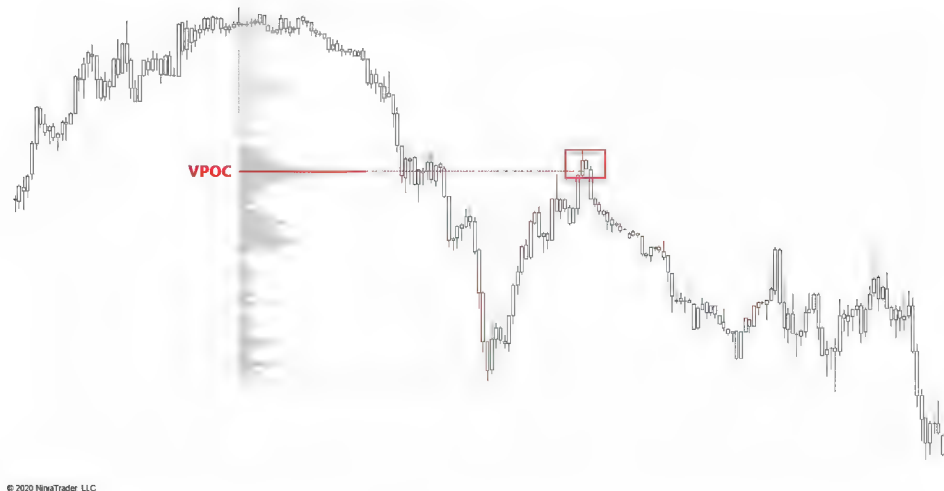
This is the best explanation to understand the fractality of the market. As we can see, the behaviors are always the same regardless of the time variable. Here lies one of the advantages of this methodology. Once this is internalized, we can be in a position to cover with a greater solidity the trade in different timeframes.

PART 7. WYCKOFF 2.0

We come to the final part after having presented what from my point of view are the most solid principles for discretionary and technical trading in the financial markets. It is what I have called Wyckoff 2.0.

It is about bringing together the main ideas of the Wyckoff methodology; the principles of the auction theory and helping us with the Volume Profile and Order Flow tools with the aim of proposing the most robust scenarios possible.

1. WYCKOFF METHODOLOGY

It is the cornerstone on which the trading approach is based mainly

because it is based on a real underlying logic, because it provides us with a context with which to propose scenarios and because it offers us different analytical tools with which to evaluate who may be in control of the market.

On the one hand, we talk about **underlying logic** because of the theoretical framework behind it. There are many concepts that Richard Wyckoff tried to disseminate, but without doubt the most relevant have been the three fundamental laws and the processes of accumulation and distribution.

Among the three laws, if there is one that stands out as a standard associated with the Wyckoff methodology, it is the Law of Supply and Demand. It is the true engine of financial markets even though they have evolved. Regardless of the type of participant, intent, valuation or anything to do with the positioning of an order, in the end it is all about executing a transaction, buying and selling; and this is universal.

Furthermore, the processes of accumulation and distribution, going hand in hand with the law of cause and effect, give us a very genuine picture of how the market moves. There is no doubt that in order to visualize an effect in the form of an uptrend it will first be necessary to develop a cumulative cause; and that for a bearish effect to take place it will first be necessary for a distributive process to take place. How such processes will develop is quite another matter.

On the other hand, we must emphasize the importance of having a clear **context** to guide us. This is one of the most important sections of the strategy since it allows us the possibility of considering certain movements based on how the price is behaving up to the present moment.

We understand that the interaction between supply, demand, buyers

and sellers creates structures that, although not in form but in substance, are constantly repeated. The genuine identification of these structures helps us to recognize the context in which we find ourselves in order to favor the development towards one side or the other. At this point it is important to emphasize what we understand by fractality and how minor structures fit into other major ones.

Finally, the Wyckoff methodology approach provides us with a series of **analytical tools** with which to evaluate who is taking control of the market during the development of the structures.

Most market actions provide us with information about the commitment of buyers and sellers to take control. The fact of developing a move in a specific way or simply failing to develop a certain move leaves us with very subtle clues with which to assess underlying strength or weakness.

Finally, the analyses under the Law of Effort and Result are very useful in order to determine the harmony or divergence in the movements. In the end, it is a matter of making the most objective analysis possible and adding up the traces in favor of one side or the other to determine who is more likely to be in control.

2. AUCTION THEORY

Although Richard Wyckoff did not use these concepts in his studies, the **balance and imbalance** are still the reasoning behind lateral and trend movements.

An accumulation and distribution range, terms that Wyckoff did use, are exactly balancing zones where buyers and sellers exchange their contracts as a sign of market efficiency, a term used by auction theory. The same is true of upward and downward trending movements, which in essence represent inefficiency and imbalance.

Ultimately the underlying logic of the principles of the Wyckoff methodology are based on exactly this, on auction theory, the **acceptance and rejection** of certain areas; and this is what I am trying to convey to anyone who alludes to this approach as an outdated and totally inoperative method for today's markets.

In addition, we incorporate the principle that the market, in order to **facilitate trading** among its participants, will always seek to go to former zones of high activity where both buyers and sellers exchanged a large number of contracts. This principle is tremendously useful for more accurate analysis and for locating logical zones for profit taking.

3. Volume Profile

The Volume Profile is a tool that objectively **identifies the most important trading zones** and volume-based trading levels.

For Wyckoff traders the analysis of the profiles helps us to improve the **identification of structures** mainly for those cases in which they develop in a more erratic way where the events are not so easily identifiable.

Other interesting uses it offers us is the determination of **market**

bias through the analysis of trading zones and trading levels; in addition to the analysis of **trend health** through the continuous evaluation of the evolution of value areas.

For those traders who do not take into account the Wyckoff methodology approach, the Volume Profiles also provide a context for setting scenarios based on the **operating principles with the value areas**. While it is true that taking into account all the analytical tools offered by the Wyckoff methodology can help us in favor of trading one way or the other, these Volume Profile operating principles also serve as a roadmap with which to expect specific price movements.

Finally, it can also be tremendously useful to take it into account to calibrate the position management; everything that has to do with the entry of the trade, the location of the stop loss and the establishment of the profit taking.

4. ORDER FLOW

After studying in depth everything that has to do with the crossing of orders and evidencing the problems of its analysis in isolation, we are in a position to limit its use only on the key operating zones.

Due to the discretion involved, using any type of Order Flow analysis without taking anything else into account does not seem to be the most solid way to approach it. If it is a subjective tool in itself, not having a clear roadmap can turn the trade into a coin flip.

This is where the importance of having a clear context and an

established directional bias comes in again. Only when we are in a potential entry situation is it time to, if anything, look at how the crossing of orders is occurring to validate our entry trigger.

Taking **imbalances** as a fundamental basis, the proposed Footprint analysis would mainly involve identifying the two key behaviors in market turns: **absorption and initiative**, right at the moment of the trigger search.

Also, in the event that we have not been able to enter such a turn, we still have the possibility of proposing an entry with a continuation pattern through the identification of **controls plus test**.

OPERATING SCHEME

Having as a fundamental basis the perception of value that we have studied with the auction theory, the context and the analytical tools offered by the Wyckoff methodology, as well as the analysis of levels and trading zones that we identified by Volume Profile, we are going to propose different trading strategies.

In order to facilitate the understanding of this section, a summary outline of the whole process is presented:

1. **Analysis of the context** to bias directionality

   - Range

- In extremes

- In the interior

- Trend

  - Interacting with the value zone

  - Away from the value zone

2. **Identification of zones and trading levels** depending on the type of strategy

- Trading zones of structures under Wyckoff methodology

- Trading zones: HVN and LVN

- Trading levels: VAH, VAL, VPOC and VWAP

3. **Scenario approach** based on current price location

- Continuous validation protocol

- Alternative scenario

4. Position management

- Input

- Stop Loss

- Take Profit

Operative

1 Context — What - buy/sell

2 Zones and operational levels — Where - location

3 Set-up scenario — How- movements

4 Position management

7.1 CONTEXT ANALYSIS

The first thing to do when analyzing any chart is to determine the context in which the price is: range or trend. Let's see a brief summary of the trading possibilities depending on the context:
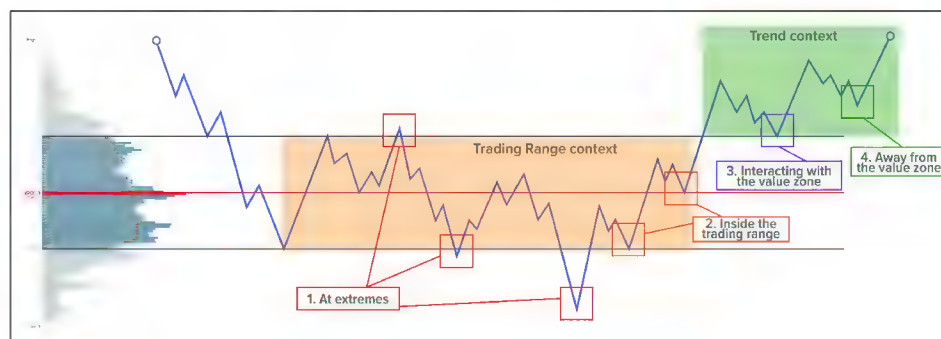
In this chart we have an ideal accumulation scheme. We see how the operating context offered by the Wyckoff methodology converges with the operating principles by Volume Profile.

Within the first three trading opportunities at extremes (1) of the range context would fit with the principle of trading in range by Volume Profile.

After the Spring the price recovers the value area and we see again the confluence of both principles: by Wyckoff methodology we would look for a test to the top of the structure while by Volume Profile we

would activate the reversal trade where we would look for the visit to the opposite end of the value area of the profile. This movement to the opposite end we would be in a position to take advantage of it firstly on the Spring and secondly if it leaves us a trading opportunity inside (2), either on the potential test of the Spring or on a higher LPS.

Profile we would activate the scenario of continuation trading in which case we would do it on the end of the value area, in this bullish example on the Value Area High.

When the price is already in the middle of the trend movement we would have to work with the context away from the value area (4) where we would wait for some kind of pullback to look for the incorporation to the current movement.
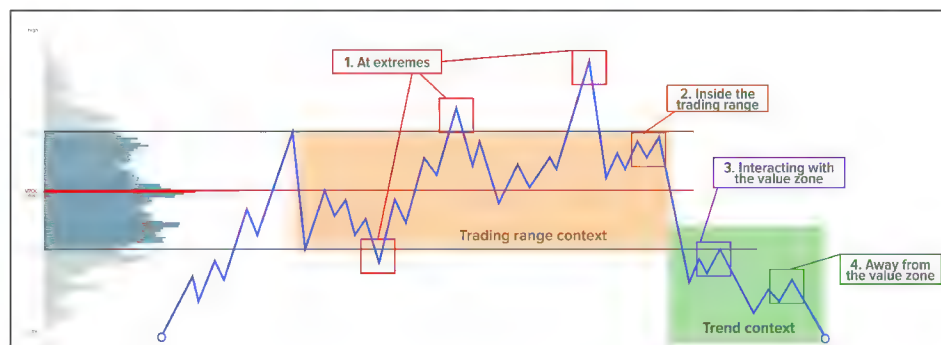
7.1.1 TRADING RANGE CONTEXT

This is the construction of the cause of the subsequent trend movement which will be either upward or downward.

This rotation phase can appear during the course of one or several

sessions (even weeks). If it contains several sessions it is best to pull a volume profile together in order to identify the trading zones globally.

1. **At extremes of the range**. If we observe the stop of the previous trend movement and some subsequent lateralization, we will determine that we are in a range context within an equilibrium zone and the trading here would be based on the search for reversals at the extremes of the structure; i.e., buy low and sell high.

2. **Inside the range**. Inside the range. If we are in the interior of a large range and we have enough space we can also raise some trade looking for the extremes. This is especially advisable when we have seen a previous shock that provides us with a clearer directional context.

7.1.2 TREND CONTEXT

When a trend is identified, the trader should only trade in favor of it waiting for pullbacks to try to join the market.

3. **In trend interacting with the value zone** if after being sideways there is an inefficiency that throws the price out of an equilibrium zone, we must evaluate the possibility that it is an effective break or a shock. If the previously analyzed footprints suggest that it could be an effective breakout, the operative here will be based on the search for the confirmation test on the broken structure or at some more immediate trading level.

4. **In trend away from the value zone**. Once confirmed the effective rupture of the previous equilibrium zone, the price will now be in a trend context and the acceptance at these new levels where it is trading makes us base the trading in favor of this direction.

The question we must constantly be asking ourselves is in what context the market is currently in. Its answer will determine the type of strategy to apply. As we already know, the only two conditions in which the market can be in e balance or in imbalance. So basically we are going to be working on range and trend trading.

Next we are going to deepen in each of the operative contexts:

7.1.3 TRADING RANGE

We will mainly distinguish two scenarios within range trading depending on the price in relation to the analyzed balancing zone:

IN EXTREMES

That the price is trading within a value area suggests that the balance is total between buyers and sellers. Neither of the two has control and therefore the price is expected to continue to move in the same

dynamic.

The trading context here would be to favor reversals at the extremes:

❖ By Wyckoff methodology it would be to seek **entry into the shakeout in Phase C**. That is to say, if we are facing the upper part of the structure we will favor the Upthrust; while if we are in the lower part we will look for the Spring. Its genuine development will suggest the visit of the opposite end of the structure.

❖ By Volume Profile we would try to operate the reversal on the limits of the value area. We would therefore look for the bearish turn over the Value Area High and the bullish turn over the Value Area Low. A rejection over such areas would suggest the visit of the opposite end of the value area.

ON THE INSIDE

On the other hand, if the range is wide enough some scenarios could be posed inside it. By Wyckoff methodology, should we observe that the price has possibly developed the test event in Phase C, it would be the **entry into the trending move inside the range in Phase D**. The only necessary filter would be that it had enough available trajectories to offer a good risk/reward ratio.

In that case, we would need to be positioned in favor of the more trading levels the better. The fact that the price is able to reach one of

these levels and effectively break it will suggest that there is some control by traders in that direction. If we are also in favor of a High Volume Node, we would already have identified the bias of the market.

Within a wide profile we will be able to identify different high and low trading zones. We must remember that the last High Volume Node generated will determine the directional bias at least in the short term. As long as the price remains above it, we will only consider bullish scenarios and vice versa if it is below it.

❖ A High Volume Node is a lateralization of the price. By pure logic, if we find ourselves above it, we can suggest that this HVN is an accumulation. Therefore, to buy we want to be protected with an accumulation below it.

❖ The reverse is true for distributions. If we are below a HVN it will be identified as a distribution, which makes us think that favoring shorts would be the most appropriate.

This type of trading inside the range will be subject to necessarily manage the position when reaching the extremes of the balancing zone, since in principle we will have to continue favoring that none of the sides has total control until the final imbalance is provoked.

Supported by the trading principles of Volume Profile, in the event that the price comes from making a shock we would be in a context of trading in reversal applying the adapted rule of 80% where the probability, after re-entering the value area is in the visit of the opposite extreme.

7.1.4 TRADING IN TREND

After a movement of intentionality that breaks the balance and where the analyzed traces suggest us that the imbalance is on one side or the other, we will seek to trade in favor of that direction waiting for a test at some relevant trading level.

INTERACTING WITH THE VALUE ZONE

New information has entered the market causing the imbalance and the first thing to evaluate is that it is not a failed breakout that generates a shakeout with re-entry back into the value zone.

If the traces suggest that it is an effective breakout, our bias now should be to look for some trading idea in favor of that direction.

❖ Under Wyckoff methodology, if we see an impulsive move that intentionally breaks the structure we would look for **entry on the Phase D breakout test**.

❖ This type of trading is also useful for traders who do not trade structures. The logic is exactly the same. Based on pure Volume Profile analysis we could wait for the price to leave a certain value area and wait for the entry in the test of the same, this would be the **continuation trade** under the trading principles of Volume Profile.

To try to determine if we are indeed in front of a potential genuine

breakout we will analyze different footprints. It is time to recall the content seen in the section

How to distinguish between accumulation and distribution?

As main traces to try to clarify if the breakout will be genuine we will take into account:

1. **The shakeout**. Key action, search for liquidity. The deeper the shakeout, the stronger the scenario. Although local shakeouts sometimes occur (on some high or low within the range), let's wait initially for the total shakeout as it gives us greater confidence.

2. **Price action and volume after the shakeout and at the breakout**. Candlesticks with good displacement and high volume denoting control by one side (buyers or sellers). At the time of the breakout, since we are facing a liquidity zone it is likely that relatively high volume will appear and even visually some wicking will be observed. This is normal and should not initially lead us to think that it could be a shakeout since takeover behavior has this characteristic: high volume and the possibility of wicking. The key is what happens next.

3. **The reaction after the breakout looking for the non-reentry to the range**. After the breakout of a value zone we must wait for the price to gain acceptance at those new levels where it will be trading. This will initially be evidenced by a sideways movement in the market out of the range.

A sign that would add further strength to the acceptance scenario would be to observe the migration of the VPOC to that new area or the

creation of a new one (perhaps that of a later session). This initially represents acceptance but we would still have to wait to confirm the action, as we saw in the section on VPOC migration.

And the final fingerprint is obtained by visualizing the non-reentry back into the value area, into the range. At that point we will already have a change in the perception of value: price + time + volume where the probability would be in the continuation in favor of the breakout movement.

It should be noted that the time consumption after the breakout should not be excessive. Enough to generate a new VPOC or its migration, but at the moment this happens the price should start the trend movement. The momentum behind the first imbalance should trigger continuation with some alacrity.

Once the price manages to position itself and stay out of the value area we will determine that an imbalance has occurred, that such a move has not been rejected and therefore we will be in a position to look for entry in favor of that direction.

❖ If we are in a potential bullish breakout, all the volume seen below, as well as that previous balancing zone can now be identified as a potential accumulation. As we know, the effect of an accumulation will be a bullish movement and this is where we want to be positioned.

❖ Conversely, when we find ourselves in a situation of a possible bearish breakout, if the price is able to hold that zone and not re-enter the previous balancing area, we will be able to identify such

process as distributive and it will be the moment to look for the trigger with which to enter into a sell position to take advantage of the subsequent bearish movement.

Away from the value zone

We may begin to analyze a chart where the price is already out of a certain value area and is moving in search of a new balancing zone. In this context of trend movement, it is advisable to wait for the development of a test on one of the trading levels that we identify.

At this point it is convenient to remember Richard Wyckoff's teachings on how markets move. It is well known that markets move in the form of upward and downward waves: therefore, the scenario proposed necessarily involves waiting for this wave, which will be corrective in nature, before continuing in the direction of the trend imbalance.

The key now would be to identify possible zones over which to wait for the price to develop this corrective movement. The Wyckoff methodology would be to look for **entry into the trend movement out of the Phase E range**. It is a confusing context since this trading according to methodology goes through the search for new intentionality candlesticks (SOS/SOWbar), minor structures and new shakeouts (Ordinary Shakeout/Upthrust), but it does not suggest us the location over which to expect the development of such behaviors.

Here we see the importance of working with these volume-based trading levels and zones. They help us determine clearer locations where

it is viable for price to go as well as offer us one more footprint to analyze the health of the trend. The ideal scenario, for example, would be to wait for the development of a minor structure above the zone where an trading level such as the weekly VWAP or any other is located.

A very interesting concept is that we will continue to trade in favor of the last accumulation/distribution until the market develops a structure in the opposite direction or until it loses the last identified value zone.

In a trending context we will point to the last relevant high volume zone that is supporting such a move. That is, if we are in an uptrend we will have very present the last high trading node (HVN) below the current price and if we are in a downtrend we will have identified the last HVN just above the price. These nodes will ultimately determine the change in market control. Therefore, we will only pose a counter-trend scenario when this zone is breached. To go deeper into this concept, review again the determination of the market bias through the analysis of the trading zones seen in the section on Volume Profile uses.

7.2 IDENTIFICATION OF TRADING ZONES AND LEVELS

Once we already know the context and have determined what we want to do (buy or sell), the second has to do with where. This involves identifying the exact location where we expect the price to develop our entry trigger.

The trading logic is exactly the same for all contexts, profiles and timeframes: identify the trading zones and levels and wait on them for our trigger to confirm the imbalance and enter the market.

Depending on the type of trading you do, you can adapt these same concepts to your trading.

❖ If you are mainly an **intraday trader**, you may use the profile of the previous session as a basis for scenario building and the profile of the current session as a support.

❖ If you are **a longer term trader** you may find it more interesting to analyze the profile of the previous week as a basis to identify the trading zones; or a Composite profile to cover weeks or months and to be able to identify the high and low trading zones; as well as to take into account the VWAP of higher

time frames such as weekly and monthly.

❖ If you trade **structures**, it may be best to pull fixed profiles anchored to the working structures and set up scenarios based on their trading zones.

Or maybe what works best for you is to do a mix of all of the above. In the end each trader will have to do individual work to determine which way they feel most comfortable as there is no universal rule about which profile to work with. The important thing is that the concepts are exactly the same for different trading contexts.

For this point it is useful to be clear that completed profiles have a higher relevance than profiles in progress. By pure logic, a profile that is still under development is susceptible to changes in its levels and therefore the importance that we can give to these decreases. On the other hand, completed profiles ultimately represent the final market consensus and their levels become more important.

As to how much time period Composite profiles should cover, there is no general rule. You may want to consider the last week, the current week, the last month, the current month or the current year. Here you necessarily have to decide on a discretionary basis. There is no one profile better than another and it is therefore the trader's job to determine which one to work with. What is recommended is that these profiles cover sufficient price action both above and below the current price in order to be able to identify key trading areas, primarily high and low volume nodes.

The search for the trigger to enter will therefore be made exclusively on the zones already indicated, distinguishing between:

❖ Trading zones of structures under Wyckoff methodology.

❖ Trading zones: HVN and LVN.

❖ Trading levels: VAH, VAL, VPOC and VWAP.

Depending on the trading context, we will favor waiting on one or the other levels:

AT EXTREMES OF THE RANGE

This is the classic Wyckoff trade in the area of potential shakeout of the highs/lows of the structure. Tradable the shakeout itself as a more aggressive entry and the test of the shakeout as a more conservative entry.

❖ **VAH/VAL.** Taking into account the Volume Profile trading levels we will also be in a position to look for reversal over the extremes of the value area, which will sometimes coincide with the extremes of the structure. Range trading.

INSIDE THE RANGE

Always taking into account that we should be in favor of a High Volume Node and with enough distance we will wait for the price over:

• **LVN.** Low Volume Nodes by their very nature establish excellent areas over which to look for potential opportunities. In

this context the ideal will be to identify such areas through a profile that covers the entire range.

- **VWAP and VPOC.** Either that of the current session for more intraday traders or that of a profile covering several of them for structure traders. These are the levels that determine the control of the market so we will wait for the price to produce the effective break above them and we will look for the first entry to test them.

Sometimes the price after producing such a break will not leave any test and the momentum will quickly move the price so that a more aggressive entry would occur after producing the movement of intentionality that breaks these levels.

IN TREND INTERACTING WITH THE VALUE ZONE

After the beginning of the imbalance and having already evaluated the possibility of continuity of the movement we will wait for a pullback to assess the entry on:

- ❖ **Level of the broken structure.** For the structure trader this is another of Wyckoff's classic entries: Entry to the test after a breakout. Initially we will wait for the price in the area of the broken Creek/Ice, which by its very nature will be a Low Volume Node. Out of the corner of our eye we will also be watching the nearby trading levels so as not to rule out entry in case the price goes for any of these, mainly the extreme of the value area.

❖ **Extremes of the value area.** The intraday trader or one who simply does not operate taking into account structures could value the entry after leaving a certain value area (for example that of the current session) and wait for the price to test the extremes of its Value Area to enter. Continuation trading.

❖ **VPOC of the range.** It will be the last trading level above which to wait for the pullback after the breakout. If it is far away from the broken end, it is advisable to put the scenario in quarantine because at that point the price will have re-entered the value area and will already have some depth. In this case and under the trading principles of Volume Profile it would be necessary to activate the type of of failed reversal trading that manages to recover the end of the value area.

IN TREND AWAY FROM THE VALUE AREA

Context of imbalance so we will already have in favor a HVN (accumulation/distribution).

We should expect some pullback at any trading level that the price is at. If the first level is too close, it is likely that it will look for the next one to develop a pullback with some proportionality in relation to the previous momentum.

❖ **Levels of the previous session profile.** Generally, and due to the fact that we are in a trend context, the levels that the price will find before will correspond to those of the previous session (Value Area, VWAP and VPOC extremes). As the day unfolds,

we may also raise some scenario on the levels of the current session.

❖ **Weekly VWAP.** We will always be very attentive to the location of the weekly VWAP as it is especially useful in these trend contexts to look for the end of the pullback and the beginning of a new impulsive movement.

❖ **VPOC of the previous impulse.** In addition, we can pull a fixed profile of the last impulse of the price and have located the location of its VPOC, as we already know that it is also a very interesting area on which to wait for the price.

❖ **LVN.** It is interesting to identify the low volume zones within the context we are trading. In this case we can use different profiles: composite to identify the general context; profile of the previous momentum and profile of previous sessions.

For all contexts we will want to trade in favor of the more trading levels the better. It is interesting to point out that the zones of confluence of trading levels are highly recommended to look for entries above them, highlighting the combination of VPOC and VWAP.

7.3 SCENARIO PLANNING

Once we have the context clear, we know the type of strategy we are going to try to execute and we have identified the location on which to wait for the entry trigger, it is time to set the scenario.

Normally the scenario to look for the entry trigger is going to be composed of one or two moves:

ONE MOVE

The price will already be positioned in favor of our idea and therefore we should only wait for a simple action that will take the price towards the trading area.

If based on the context what we want is to buy, we will identify the trading levels we have below where the price is likely to go.

If, on the other hand, once the analysis of the context is done, we determine that the best option is to trade short, we will identify the most immediate trading levels above which to look for the short entry trigger.
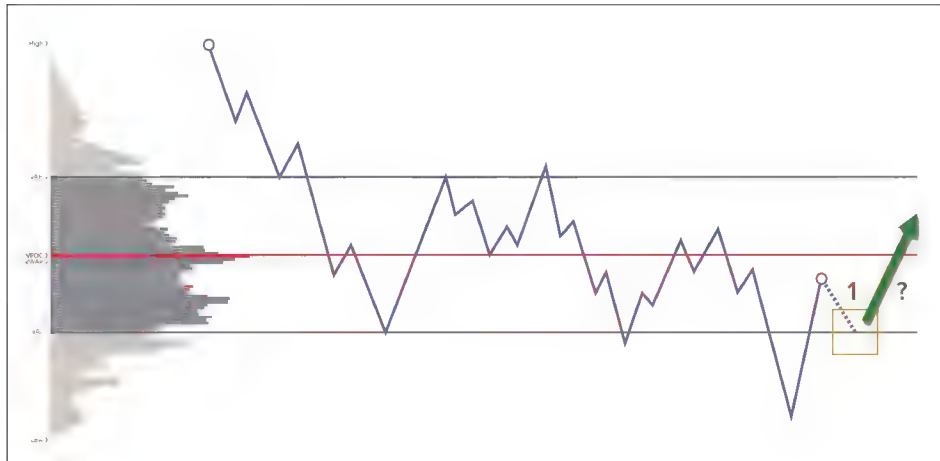
In this example we see that we are in a range context and in a situation of potential Spring, so the scenario approach would be to wait for a single movement to develop the test and look for the trigger of entry in purchase.

Two moves

We may only want to buy or sell if certain price action occurs.

If, based on the analysis of the context, we want to buy, but the price is below the trading zone, we should wait for a first positioning move above this zone and a second test move. Now we would be in a position to look for the entry trigger.

The same would happen if we want to sell but the price is above the trading zone; in this case we should wait for a first movement of recovery of the zone and a second test movement.

In this other example the reading we make is that we are in a range context in which the price comes from developing a potential Spring and has serious possibilities that it is a cumulative range.
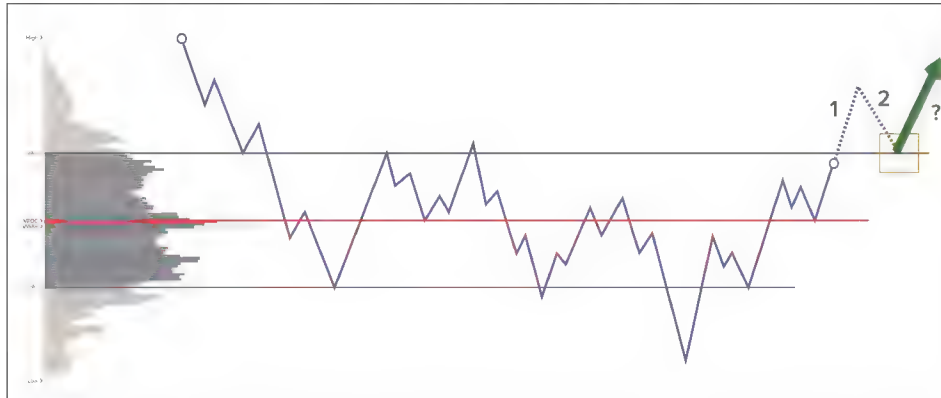
At that precise moment and knowing the roadmap offered by the methodology we would be ready to wait for the entry in purchase after seeing the bullish breakout (1) plus the subsequent test (2). For context we want to buy but the price is not in an operationally attractive area (as it is going to face the key area) so it is appropriate to propose a two-move scenario.

As we know, the price could leave in 1 an Upthrust and re-enter the price back to the balancing zone, but initially we should be directionally biased to the upside after seeing that the downthrust and the breakout bullish movement meet the characteristics.

The market obviously will not always follow our approach. A large number of occasions we will see how we are forced to change sentiment based on what the price is doing. This is the key to continually analyzing the reaction of participants as new information comes into the market.

The best way to approach this scenario-building process is through

a continuous validation protocol. This is about actively reacting to what the market does (If X, then maybe Y). This means "If the price does this, then let's expect that". It is an optimal approach to know at all times what to expect the price to do and be prepared to act with the alacrity required.

*"**If** price breaks Creek, **then** I'm going to wait for it to test to look for buys. **If** on the other hand there is a failed breakout, **then** I'm going to wait for a test in the opposite direction to enter short"*

The key here is to assess all the possible options that the market can develop and, even if we are initially directionally biased to one side, we should always also take into account an alternative scenario in the opposite direction that allows us to make a quick change of bias if necessary.
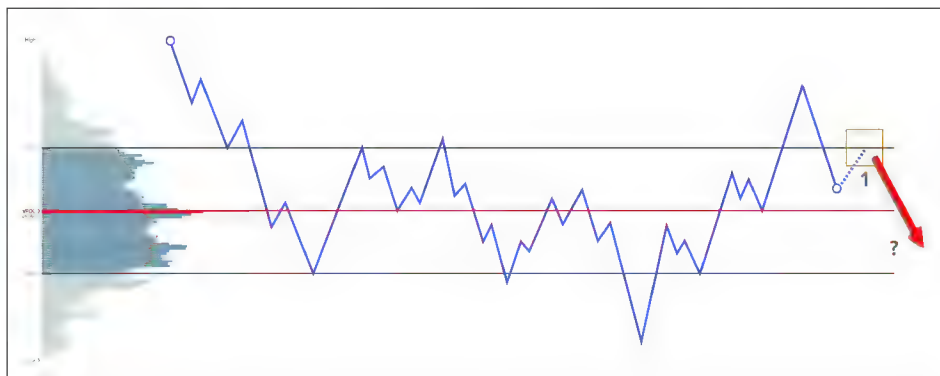
An example is when the market faces the top of a structure. We are in an trading zone, in a situation of potential bullish breakout or shakeout. It may be that by context we are directionally biased to favor the bullish breakout and that we are therefore looking for purchases to test the breakout; but when the time comes what we observe is that the price re-enters the range, strongly refusing to rise and leaves what looks like a bullish jerk (Upthrust). At that point we should have enough capacity to read this in real time and change the scenario approach to look for the short.

7.4 TRADING MANAGEMENT

While it is true that the most important element of this combination is undoubtedly all that the Wyckoff methodology offers us, we have already seen that the Volume Profile and Order Flow tools can certainly be useful when it comes to improving our scenario and trading approaches.

Thanks to the principles of the Wyckoff methodology, we will be in a position to set up scenarios; thanks to the identification of the zones and trading levels by Volume Profile we will be able to refine with greater accuracy where the price is most likely to go; and thanks to the precision of Order Flow it will allow us to further confirm and calibrate the entry trigger.

7.4.1 ENTRY

Regardless of the trading context, the market entry trigger will always be an action that denotes intentionality on the part of the large trader in favor of our direction.

For pure price action analysis we will continue to work with the significant candlesticks:

❖ Sign of Strength bar (SOSbar). Wide range bullish candlestick with close in the upper third and relatively high volume.

❖ Sign of Weakness bar (SOWbar). Wide range bearish candlestick with close in the lower third and relatively high volume.

For those who want to observe the Order Flow I would only recommend working with the concepts already explained:

❖ Turning pattern: absorptions and initiatives.

❖ Continuation pattern: controls and tests.

In essence what we would look for in the turning pattern would be to confirm that the SOS/SOWbar carries initiative; and in case of losing the initial trigger we could look for a re-entry in the continuation pattern.

ENTRY ORDER

As we saw in the section on order types, participants can enter the market in different ways, basically with Market, Stop or Limit orders.

In our case we are going to use Stop orders. Remember that these are placed above the current price if we want to buy; and below the current price if we want to sell.

With the development of the significant candle we have an obvious sign of interest, but it is interesting to use Stop orders as a definitive filter that suggests some continuity in the movement initiated with the trigger candle.

Sometimes we will see the development of what initially looks like a candle of intentionality and just after its closing the price reverses sharply in the opposite direction. What has happened is that internally a takeover process has taken place at all these price levels and traders with greater capacity were positioning themselves on the opposite side. By using this type of order, although it is true that we are not saved from this potential situation, in many occasions where this is happening, it will prevent us from entering the market.

If we are really facing an imbalanced movement, this will have a strong momentum where it will continue to push in favor of that direction. With this type of limit order we will be entering in favor of the momentum, of the imbalance.

In any case this section should be evaluated more in depth by the trader. It may be preferable to enter with a market order after the closing of the trigger candle, after seeing an aggression in the track without waiting for the closing of the candle or even use a limit order to enter on a

possible pullback. Either option could be valid.

## WHY YOU SHOULD NOT ENTER WITH LIMIT ORDERS

Simply because you would be betting that the move you expect is going to happen, and if you remember, we are dealing in an environment of total uncertainty so we don't know what is going to happen.
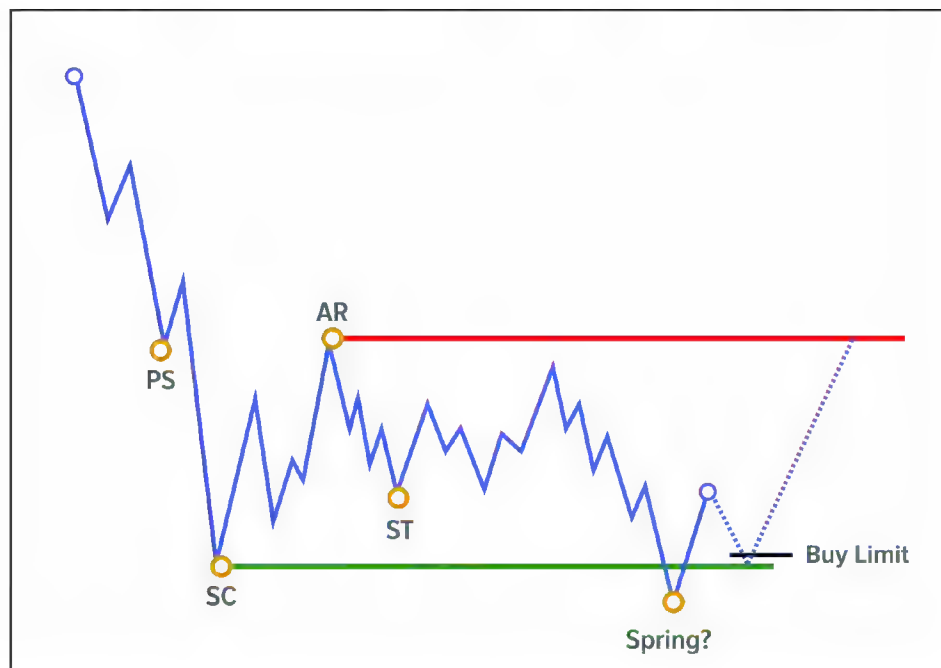
For example, you might see a chart in a potential Spring situation. If the analysis is correct, we know that the roadmap offered by the methodology goes through the search for at least the top of the structure; so maybe you think it is a good option to place a Buy Limit entry order waiting for the Spring test to develop.

But such a test may never take place and instead the price will continue to fall, confirming that our analysis was not correct, which

would cause us to add a loss. The problem is not in taking that loss, since it is part of the business, but rather that the basic approach was not the most solid.
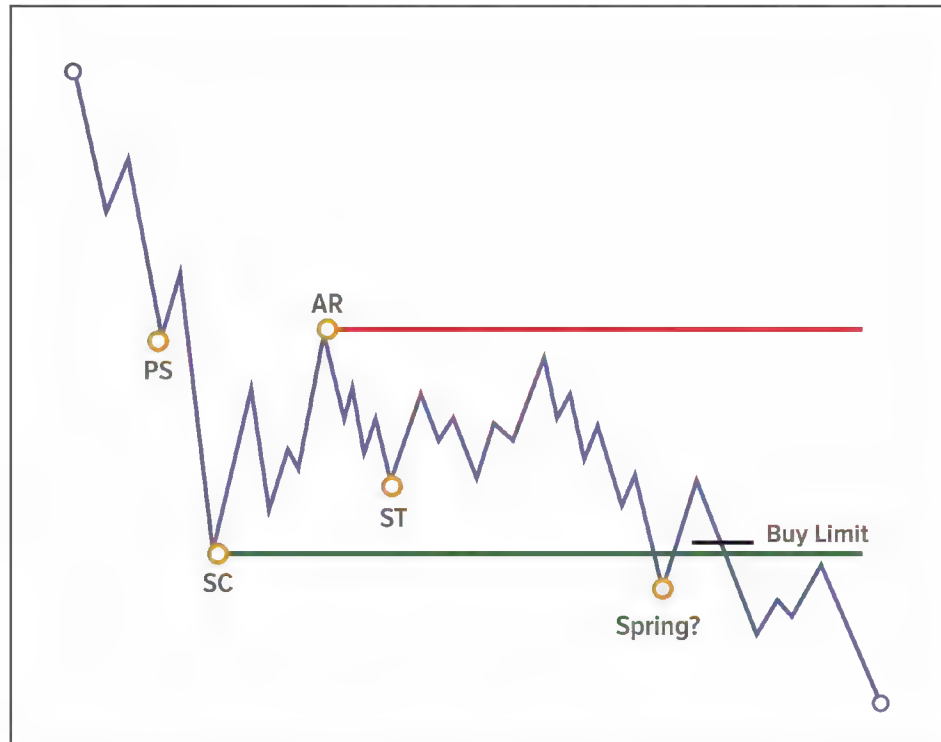
At the point where you see the Spring potential and place the Buy Limit, you are betting that the price will develop two movements: the bearish movement to generate the test and the bullish one that will take the price to the top of the range. And the key is that we can only propose the development of one movement.

In this case, we could initially propose the bearish movement as a test since we are in a potential Spring position; and once the price reaches the area where it "should" turn, we have to analyze again the price action and the volume to see if the imbalance that generates the bullish turn occurs and then we can propose the next bullish movement up to the Creek.

The underlying idea is that we must make a continuous analysis of the interaction between buyers and sellers; and even if we are directionally biased to one side based on the context, we must confirm when the time comes that the approach is solid and that the market itself confirms it.

If in a potential Spring test position we see that aggressive buyers appear and push the price up, this is the footprint we would need to see to confirm that our analysis appears to be correct and in such a case would offer us an trading opportunity. It should also be remembered that seeing our entry trigger above the proposed zone has nothing to do with whether that trade then turns out in profit or loss. As we have already seen, new information is constantly entering the market and this could change participants' perception of the security at any time.

7.4.2 STOP LOSS

From a pure Wyckoff methodology point of view we will continue to recommend placing the stop loss on the other side of the significant candlesticks (SOS/SOW bar) and structures. The logic is that if large traders have actively entered these developments they will defend their position in case the price goes against them.

Additionally, we will always want to place the stop loss on the other side of the more levels and trading zones the better.

The first zone we will be looking for will be a low volume node (LVN). As we have already mentioned, by its very nature this low trading

zone is likely to act as a rejection and that is exactly what we are looking for: that in case the price reaches this zone it will cause a V-turn and that this rejection will protect our position.

It must be taken into account that the other way of representing the rejection is that the price quickly crosses those price levels. If so, it would surely reach and execute our protective stop. As we do not know what may happen, we must necessarily use this type of zone with the initial premise that the type of rejection it represents in a possible future visit is that of the V-turn.

The logic of using the rest of the operating levels protecting the position basically lies in the fact that a high amount of volume will be traded on them and could also act as levers that cause a turn in the price. Some might think that if these levels act as magnets due to the liquidity that is located on them, why use them to protect the position? If we are bought and we have them below, based on the principle that they act as magnets, wouldn't it be logical to think that the price will go looking for them? The logic here is that at the moment of entry we are working in favor of a price imbalance looking for its continuity. And therefore it is the moment when the price will move away from such levels that generally represent equilibrium and acceptance by all. If at the moment of truth the imbalance is not such, we still have the possibility of saving the position if at these levels participants that turn the market re-enter.
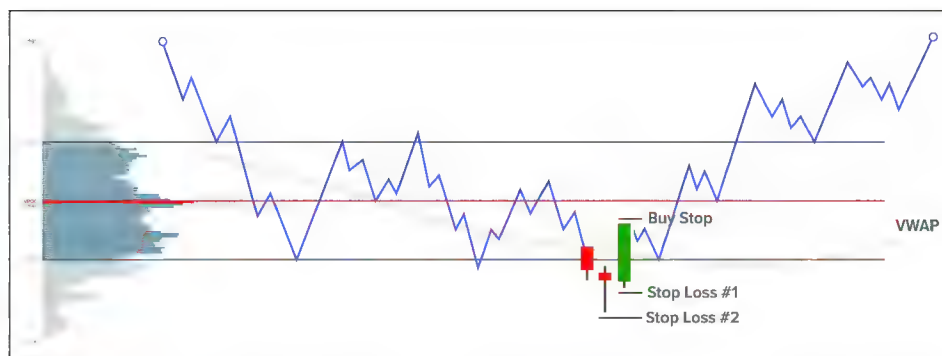
If we are in a potential Spring situation and we see the appearance of a SOSbar, we would be in a position to enter the market with a Buy Stop order at the breakout above the candle leaving the Stop Loss location either below the trigger candle itself (#1) or below the entire structure (#2).

At either of these two points the Stop Loss would be protected first by the imbalances generated in the trigger candle; by any VWAP that has been generated, and by the Value Area Low of the structure's profile which in essence is the Low Volume Node.
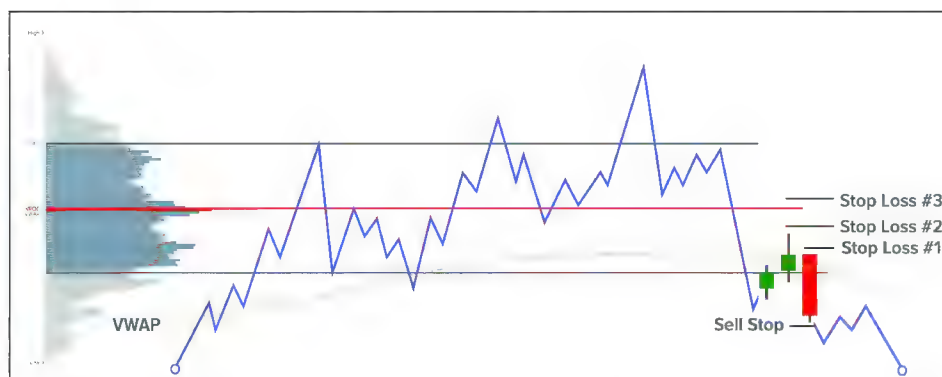
In this bearish example, if the SOWbar appears offering us the short entry trigger, we would place the Sell Stop order below its low and we would also have several locations for the Stop Loss: just above its high (#1), at the highest high generated in the turn (#2) and on the other side of the VPOC of the profile (#3).

We would be protected by the candle itself, by some VWAP and by the Value Area Low of the profile that besides being a Low Volume Node in this case coincides as the ICE (support) of the structure.

It would be necessary to make a point with respect to the VPOC of the profile. In this example we have it a little further away but it is still a relevant level to take into account. The trader should analyze if placing the stop at that level would still have an acceptable Risk:Reward ratio.

This is one of the peculiarities of discretionary approaches and that is that we must adapt to market behavior. Sometimes all the levels will converge in a very narrow range giving us greater confidence; while other times they will certainly be separated and we must evaluate which location is more optimal and if the risk is worth it.

7.4.3 TAKE PROFIT

In my first book "The Wyckoff Methodology in Depth" I already listed the possible actions we could use to make profits. We mainly talked about:

1. Climatic bar evidence. Especially useful when we do not have any reference to the left of the chart.

2. After the development of the Phase A stop of the previous trend movement.

3. In liquidity zones generated by relevant price turns (previous highs and lows).

Thanks to the addition of the Volume Profile we can add a new objective way even more useful when we have price trading in the direction where we want to take profits:

IN AREAS OF HIGH PREVIOUS TRADING

It is about using the High Volume Nodes that we have in the direction of the trade. We already know the magnetic nature of such areas and it is therefore that they provide us with some confidence to use them as targets.

Supported by the auction theory, after an imbalance the market will look to find traders with the opposite bias who are willing to trade again. This is why the price will move to those areas where there was previously high trading as the same thing is expected to happen again.

Very important to remember again the short term mentality of the market where the last trading areas will have a higher relevance in terms of price attraction than the older areas.

The concept of High Volume Node when setting the target could be somewhat ambiguous. The HVN is an area, and the order to take profit is a specific price level, Where exactly to place it? For this purpose it is very interesting to take into account the VPOC of that particular value zone. The HVN serves us to identify the probable price visit zone and its VPOC for the exact location of the target.

For a more intraday trading it can be extremely useful to have identified the **Developing Volume Point of Control** (DVPOC). These are

price levels that were at one point in time the VPOC for a session, whether or not they were the final VPOC for that session. As we know, the VPOC of the session is changing based on the negotiations that take place, and this level represents that footprint of change. In short, what we are dealing with is a level of high trading and therefore most likely to have some magnetic behavior.
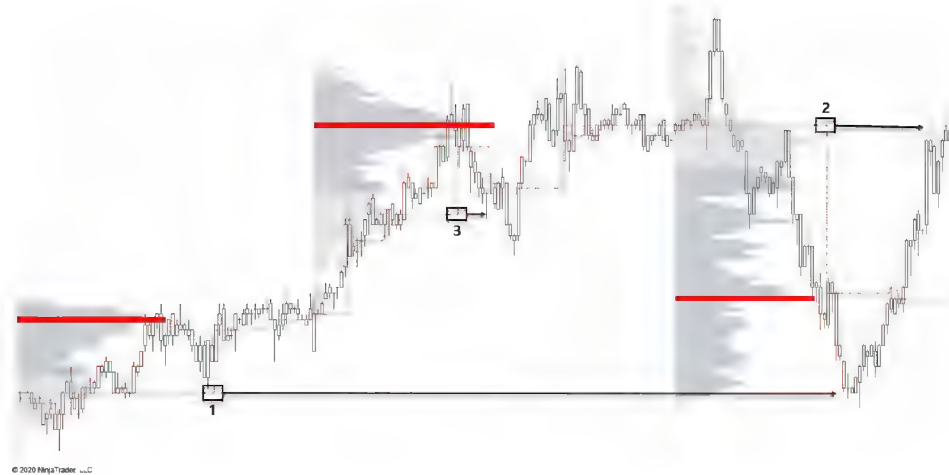
In this example we see how the price distributes in this profile in the form of P and the bearish development is going to look for an old DVPOC below (1) to turn back from there in the form of V to go to test again another DVPOC of the current session above (2).

It should be noted that we only take into account those DVPOCs that have not been tested. In this example we see other DVPOCs that have already been tested and therefore would not be valid for target setting, as would be case 3.

The same would be true for **naked VPOCs**. We have not discussed this level before because its usefulness is focused almost exclusively as a possible target level. Naked VPOCs are VPOCs from previous sessions that have not been tested. Unlike DVPOCs, naked VPOCs were the final VPOC of the session. There are statistics that claim that VPOCs from

previous sessions are tested in the following days with a high probability. That is why they are very interesting to take into account.

In the following example we see the magnetism exerted by these levels attracting the price and even generating a subsequent turn.

In both charts different configurations have been used to visualize specifically one or the other level (DVPOC and nakedVPOC). It is recommended to use both since by their very nature they both represent previous high trading zones.

© 2020 NinjaTrader LLC
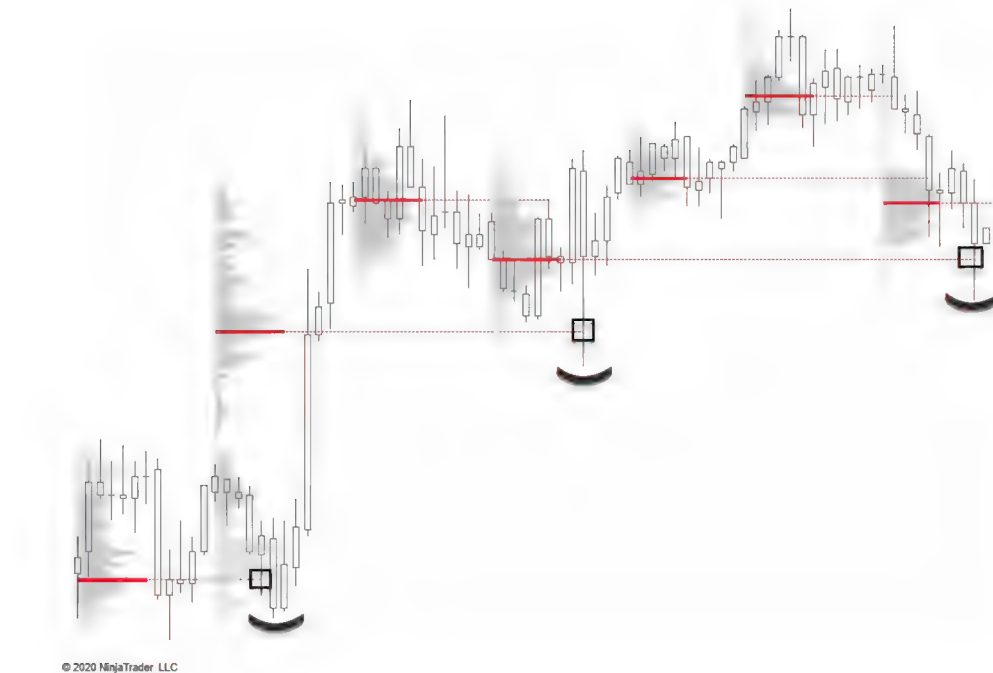
7.4.4 WHAT TO DO WHEN THE PRICE GOES WITHOUT US?

Sometimes we will have to see how even having made a good scenario approach the price initiates the movement we were looking for without us, having had the possibility of entering the market.

If there is something that is not recommended is to enter by momentum guided by some kind of negative sentiment to have lost the movement. Entering in desperation is generally not a good strategy in the long run. If the price goes without us absolutely nothing happens, it is part of the game just like stop loss jumps. If the underlying idea has not changed, we can continue to look for entry in new trading zones.

It is much more interesting to make another type of constructive reading in this situation, such as that **you have made a good analysis**.

While it is true that we approach the market with the ultimate goal of obtaining profitability from its movements, the fact of being right in the analysis should already be a reason to be certainly satisfied.

The reading is that your analysis of who was in control of the market and what was the most likely move was good and this is tremendously important as an example that ultimately the knowledge is internalized and that by following that line it is a matter of time before the results appear.

The only thing that has failed is either the exact visit to the area where you expected the price to be; or that the price has not left a genuine trigger to generate the sending of the orders. In any case, it is necessary to remember that we have absolutely no control over the market and that our task is to set up scenarios with the highest possible probability.

Also, we must also keep in mind that, having as one of the main rules the conservation of capital, you may not have taken advantage of the

movement you expected but at least you were not positioned on the wrong side of the market and therefore you do not add any losses.

PART 8. CASE STUDIES

In this last part we are going to see in detail some real examples where the theoretical concepts previously presented are put into practice.

As I always comment, the really interesting thing about this type of examples is to observe how the market tends to present the same schemes but in different ways depending on the moment. This is what we are referring to when we state that the market must be given "flexibility" in the development of structures.

This is something that, by now, you should have internalized. The Wyckoff methodology is not about labeling almost robotically every move. It doesn't make any sense and we have already explained why. It is about analyzing as objectively as possible the actions of the market (both what it does and what it fails to do) in order to give more control to buyers or sellers.

Also, this section will be useful to see how the Volume Profile and Order Flow readings are incorporated into the trading plan.

8.1 EURO/DOLLAR ($6E)CURRENCY CROSS

Chart on July 2, 3 and 6, 2020. Range context, extreme trading; plus trend context, trading away from the value zone.

This example is very representative of almost everything studied as it is full of interesting details.

First we see the stop of the bearish movement (SC, AR, ST) starting from there a new lateralization or equilibrium context. The UA already suggests to us in Phase B buying intentionality by testing the highs of the structure. Maximums of the structure whose nature is a LVN (Low Volume Node) as reflected in the profile of the first day. LVN that

repeatedly acts as a rejection zone causing the price to turn until it finally crosses it with speed. The Spring plus its test initiates the bullish imbalance moving the market higher with relative ease.
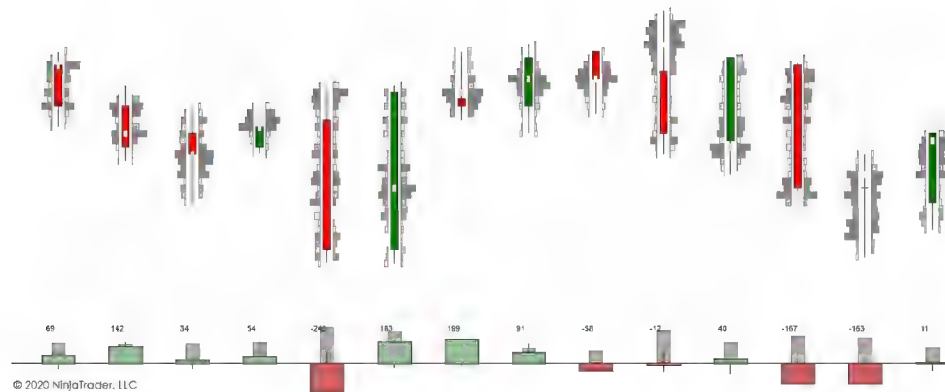
Looking deeply at this potential Spring action on the footprint chart, we see how the pattern of a turn in favor of the buyers is represented by the rotation on the Delta (-240 to +183). In this first action it should be noted that the bearish candle does not show a clear process of potential takeover, as we suggest looking for; but this is the reality of the market. We will not always see theoretical patterns represented in the same way and the case is perfect to exemplify the need to give flexibility to the market and be prepared for anything.

Beyond not having seen this potential takeover process, the objective is that after a wide range bearish candle and high volume the price does not have continuity and turns with the same aggressiveness to the upside (divergence effort/result).

Very clear the following action presented as a continuation pattern with the creation of the control plus the test. The control would be reflected by the maximum trading zone within the bullish candlestick. We see how the price is going to develop the test right at that zone to continue the imbalance upwards from there.

In addition to the price dynamics discussed within the range, we can also observe other signals in the volume such as the decrease throughout its development, the appearance of a greater presence of buying Weis; as well as the reading of a finished auction that we can make of the profile of day 3. That the volume represents a potential finished auction in confluence with a potential Spring is a very interesting signal to assume as a lack of interest to continue falling.

Another very striking point of interest are the continuations that occur once the price is away from the value zone and in an uptrend context. Here the concept of VPOC migration appears to support possible entries. We see how after the migrations the price continues its bullish development (C1 and C2) almost immediately. This is a very useful input for this type of context. In the third continuation (C3) the market is going to visit one of the most important trading levels, the weekly VWAP, to develop a new upward momentum from there.

Regarding the targets, the first one (tp1) to take into account would be that former high trading zone (High Volume Node) which also left a DevelopingVPOC. And without further volume references to the left, subsequent targets would be to identify liquidity zones as relevant previous highs (tp2).

8.2 POUND/DOLLAR ($6B) CURRENCY CROSS

Trading profile chart week on June 29 to July 3, 2020. Range context, trading inside; plus trend context, trading interacting with the value zone.

In this case, the operating profile has been used as the one set by the volume traded during the previous week. As already mentioned, there is no one profile better than another and it is therefore up to the trader to choose the trading style he/she wants to develop. The important thing is that the profile you decide to work with is completed to avoid confusion when the current levels are modified.

In the first red box we would be in a trading position waiting for our entry trigger. We are inside the value area but interacting just above the VPOC of the profile, so our bias at that point, being above that VPOC, should be to favor bullish continuation.

The price develops a lower structure and in Spring potential position coincides with a test at the operating level. From there it generates a first upward imbalance that causes the break of the profile by its upper part. Very visual how the bullish Weis stands out signaling that high participation in the breakout movement; and how the following action denotes lack of interest in the movement.

Just at that precise moment, at the end of the breakout movement, the trader handling the tools proposed in this methodology should necessarily be favoring bullish continuation. Basically because we come from observing a minor accumulation structure that has managed to break to the upside suggesting us therefore that the control is apparently on the side of the buyers.

As suggested in the trading checklist, we already have the first point resolved which is: what we want to do, whether to buy or sell. In this case and as we have just argued, we want to favor buying. Now we would need to answer point number two of the checklist, which is: where we are going to want to buy. is: where are we going to want to buy. We need to identify the level where we are going to be waiting for the price. In this example we have a very important confluence zone: the Value Area High of the broken weekly profile, the weekly VWAP (green line) and the upper end of the previous accumulation structure (Creek).

The identification of the second point of the checklist leads us immediately to the third, which is the scenario approach. In this case, as

we are already in favor of the trading level, we would be waiting for a single move for the price to position itself in our trading zone.

© 2020 NinjaTrader, LLC
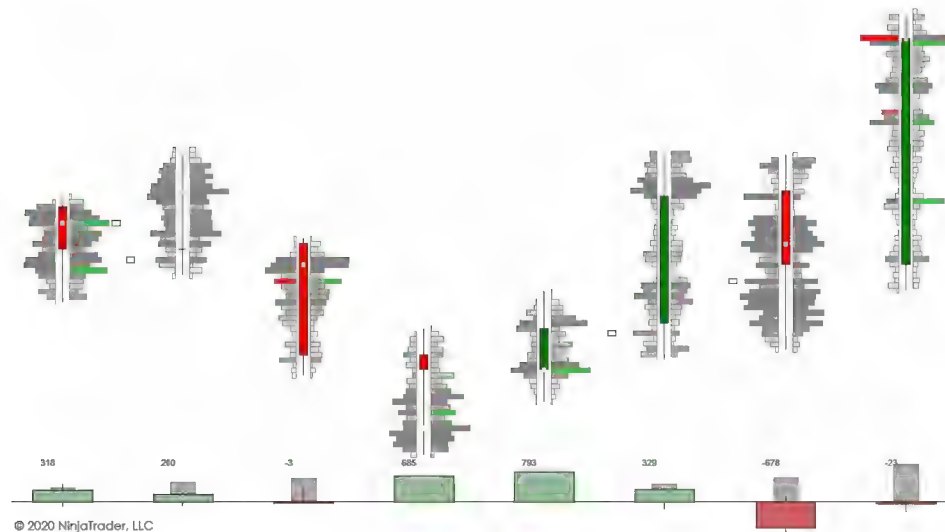
Once the price has arrived there, we would finally have to wait for the development of our entry trigger, which is part of step four of the checklist. In this example we have used the Footprint to visualize the order flow and it has allowed us to see the entry of aggressive buyers represented on these two candlesticks with positive delta of 685 and 793 that have also left imbalances in the ASK column. We would already have our checklist completed and therefore ready to send the orders to enter the market.

The recommended position management would be to place a buy stop order at the breakout of the bullish candle, with the stop loss at the low of the bearish candle. Returning to the previous chart, we would need to identify an interesting trading level on which to take profits or, failing that, a previous high that establishes a clear liquidity zone. In this case, further to the left we would have identified an old VPOC not yet tested (nakedVPOC).

8.3 S&P500 ($ES) INDEX

Chart on July 17, 2020. Range context, trading inside. Beginning of bullish reversal.

In this first 15 minutes timeframe chart we have the exit of the price below the value area of the previous day to begin to develop in that area a new range.

Initially and favoring the trading principle of bearish continuity, unless a longer term context would have biased us differently we should have been willing to favor short entry in a potential test to the Value Area Low of the previous session's profile.

Instead, what we see is that the price manages to re-enter the Value Area Low and does so preceded by a jolt to the lows that triggers the bullish movement. Here we can see the importance of handling different scenarios depending on how the price behaves and of making a continuous evaluation of the movements.

If we look closely at the chart, after re-entering the Value Area the price pulls back to test the area where the VWAPs converge. Maybe that test, because it was slightly below the VAL would not have given us all the confidence to trade it as a buy; but the opportunity appears next when the price recovers the VA and now it does leave a test inside.

In the following chart of shorter time frame (5 minutes) we see in more detail this action. Here the structure under Wyckoff methodology is more recognizable. Although the stop of the bearish movement is not very genuine, we see some lateralization and the Spring plus test that originate the bullish breakout. Once again, the visualization of the Weis wave indicator is very useful, suggesting the institutional support of the movement. After the breakout, we do not re-enter the range accepting these levels.

At the moment when we are in a situation of potential BUEC to provoke the bullish imbalance, we are already waiting for the appearance of our entry trigger that allows us to launch orders to buy.

It is therefore time to, if anything, begin to visualize the Footprint chart in search of that turning pattern that alerts us of the imbalance in favor of speculators who are opening positions to buy.
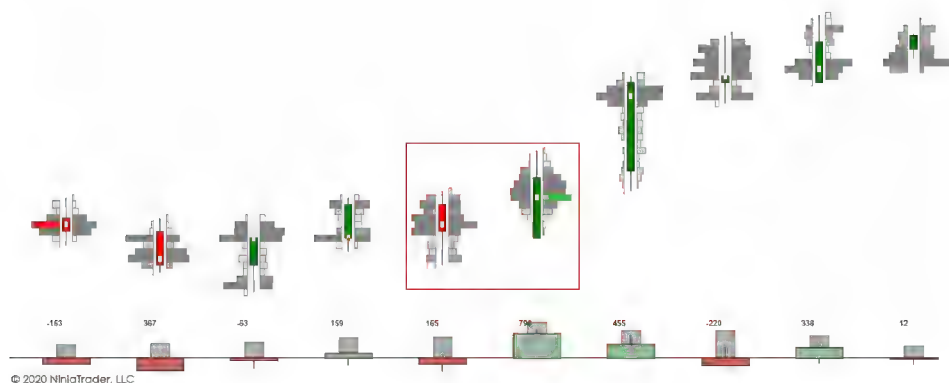
This is exactly what we see represented in the box shown. Beyond the fact that the potential takeover is visual, the imbalance that is reflected in this bullish candle, with a relatively higher volume than average and with a very positive delta comparatively speaking, has a greater relevance. After seeing this, it would undoubtedly be time to send the buy order.

As a target we would first have the opposite end of the value area, in this case the Value Area High, a level that also converges as seen in the second chart with a former VPOC area.

8.4 AMERICAN DOLLAR/CANADIAN DOLLAR CURRENCY CROSS($6C)

Chart of July 22, 2020. Range context, trading at extremes.

The price starts the session the next day within the previous day's value area, where it begins to sideways suggesting to us a total balance between buyers and sellers. The valuations of the agents that are operating at that moment are very similar, which causes a continuous rotation around the central zone.

With this basic context; and under the hypothesis that the market continues in this state of equilibrium, that no new information arrives that causes the participants to change their valuations, the operative principle

to work on is to look for the reversion at the extremes; that is to say, to look for purchases when the price interacts with the low part of the value (Value Area Low) and sales on the high part (Value Area High).

We are therefore ready to set up the scenarios. We know what we want to do (buy or sell) and we know the exact location where we will wait for the price to look for the entry trigger. This means having a plan and not following the price reactively and by momentum.

As you can see on the chart, the price is finally going to visit the bottom of the value zone. It performs a very precise test and from there it launches towards the opposite extreme. This movement could be labeled within the Wyckoff methodology events as a potential Spring since it would be found shaking the lows of that small structure that has been generated during the two days.

At that precise moment it may be useful to visualize the order flow chart to confirm or not our buy entry trigger. We are in the right location and; as we know that the price could extend a little longer before turning, or even continue the bearish development, we need to see the aggressive buy entry above that area to determine the possible start of the imbalance to the upside
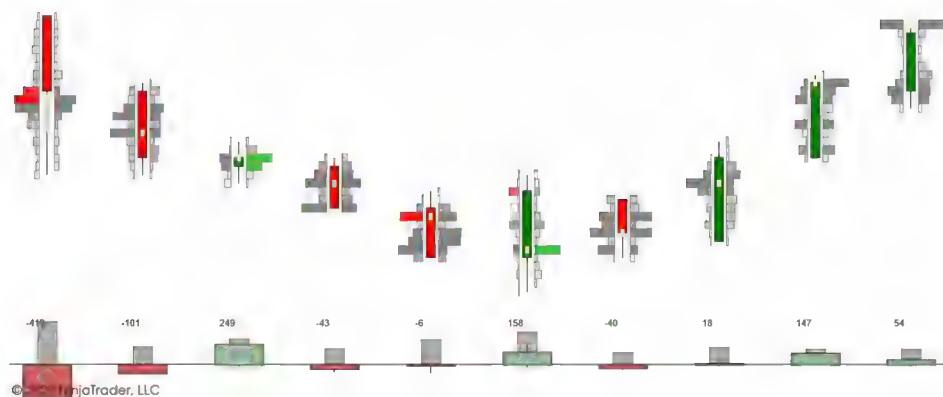
And right at the location of the potential Spring we see the

appearance of that imbalance on the ASK column, which could suggest speculative buying entry. This would be the signal we are looking for before proceeding to send orders.

As we can see, the price then launches towards the opposite extreme, crossing the entire value area. This is an example of trading under the 80% Market Profile principle. Principle that suggests that; in case the price tries to break a value area and fails, re-entering again, the price has an 80% chance of reaching the opposite end of the value area. Although this strategy was originated for Market Profile, the same principle can be used working with Volume Profile due to the similarities of their theories.

The profit taking in this case would therefore be very clear: by testing the Value Area High of the trading profile. If the price reaches this point, the situation would be very interesting because we would be coming from a potential Spring; which, as we all know, is the event that unbalances the control of the upward structure. Therefore, if we are right in the analysis, it would still have to develop at least one more upward movement.

That would be the roadmap we would be driving, but certainly that test to the VAH is our first management zone. Here you could decide to close the entire position or leave some contract, but what we should do at least is to protect the position; that is, move the stop loss to the entry level (known as Breakeven)

8.5 POUND/DOLLAR ($6B) CURRENCY CROSS

August 03, 2020. Trend context, trading interacting with the value zone.
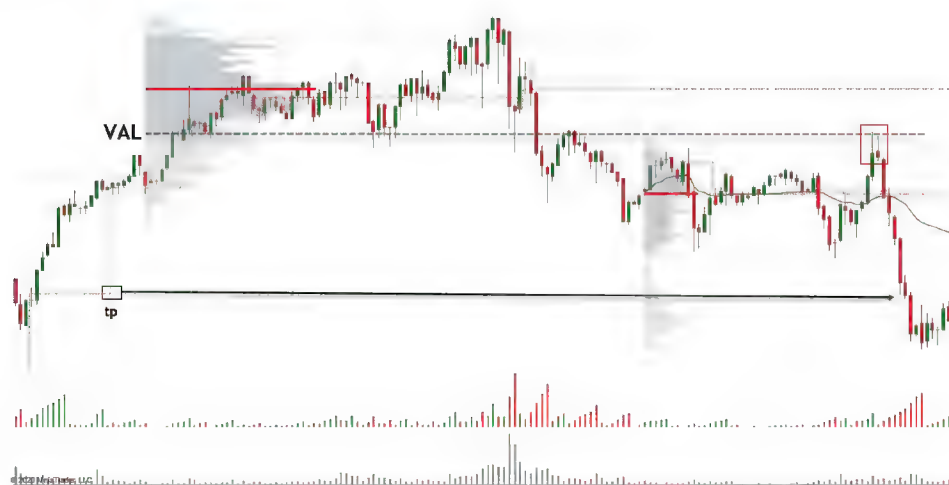
Example of intraday trading favoring the shorter term context, in this case, using as trading profile the one of the previous session.

The fact that we use profiles of previous sessions as a framework on which to base our trading does not mean that the principles of the Wyckoff methodology are left aside. As we can see, it is essentially the same; the only difference is in the time frame used.

Any Wyckoff trader with some experience could identify a

structure and label all the events that the methodology teaches us within that profile. Moreover, by the time it is pointed out as the zone where to look for the entry trigger, the most astute analysts will have already been able to identify a new structure. This is what is important, the context, what you are going to favor (buy or sell) based on what the price does.

In this example, having seen that we are coming from a distributional structure, we will initially be favoring shorting. The next step would be to identify at what point we are going to wait for the price to proceed in search of the trigger. Here, the first interesting zone is the Value Area Low of the profile.

During the current day the market begins to lateralize creating new value in this area. This is a signal of acceptance of the previous distribution, so we can add one more input in favor of our bearish scenario.

Once the price is in the proposed trading zone, we have an important confluence of events since on the one hand we would be developing a test to the old broken value zone; and also this movement could be part of a shakeout of this new structure that would be forming

It would be the ideal time to go and analyze the Order Flow chart and see what is happening inside the candlesticks and if in the shorter term our entry trigger is confirmed.
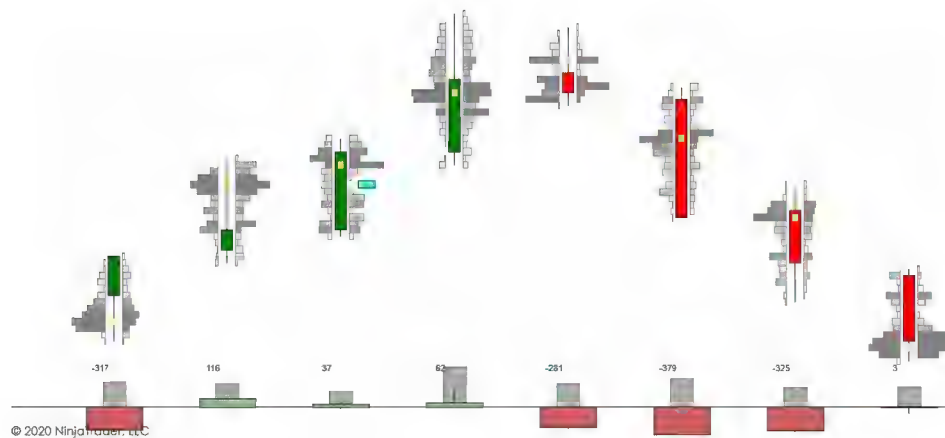
And right in that location what we see is this, a bearish turn with a lot of selling aggressiveness. Already in the last bullish candle we can suggest some takeover of purchases evidenced by the high volume, the large number of executions taking place in the ASK column and the no bullish continuation reflected in the upper wick.

Following this, a large sell participation evidenced mainly by the large negative delta suggests a sell initiative and the possible beginning of the bearish imbalance. The next bearish candlestick would serve as a definitive confirmation of seller control: wide range candlestick, with good volume and closing at lows, what we know by Wyckoff methodology as SOWbar (Sign of Weakness Bar).

These examples are very instructive to see the infinite ways in which the same action, as in this case is the bearish turn, can appear on the chart. Sometimes it will be very clear both the takeover and the initiative process; and other times it will not be so. Given that we are in a particular trading area and that we have the support of the context, it would be more interesting to prioritize the appearance of the initiative in favor of the direction we expect the market to move over visualizing the previous takeover process, since as we see it does not always appear in the most genuine way.

Unlike the takeover process, the initiative would be an indispensable action (for traders who decide to analyze the order flow), since ultimately we are waiting for those speculators to appear to definitely unbalance the control.

Finally, in this trading possible Take Profit would be located at that old level that was VPOC and that by its very nature represents a high trading area even in the short term.

8.6 EURO/DOLLAR CURRENCY CROSS ($6E)

Day August 31, 2020. Range context, trading inside. Principle of failed reversal.


This type of trading usually presents major confidence issues because we initially come from prioritizing the reversal scenario and then change bias.

Also using the previous day's profile as a trading basis, we see that on the last day the price tries to leave this value zone through its upper part causing a rejection and re-entering the range. At that point we begin to look for the short entry favoring the reversal principle.

The failed reversal is a perfect example of why trading levels should be used to manage the position as the price interacts with them. They are decisive zones and we do not know what will happen, therefore the only thing under our control is to minimize the risk of our trading.

If just above the identified trading zone we see a reversal like the one seen in the footprint chart, at least two decisions could be made in time. First, if we are positioned short, we may want to close the position and avoid touching the Stop Loss even if it is already in a Breakeven position. This type of active management, at times like this, is very important as it will allow us to further reduce the risk by being able to take a few more points off the market. On the other hand, if the longer-term context accompanies, you may want to enter into a purchase favoring this principle of failed reversal.

In case of considering a purchase, there is an interesting detail to take into account. As the entry trigger is below the weekly VWAP, it could be a good option to make such a trade with a lower leverage, for example, in a CFD market. This is a perfect example to evaluate the possibility of trading the same asset in different markets depending on the confidence we have in the trade in question. If we find ourselves in a situation like this in which we observe such elements against the proposed scenario, the most advisable thing to do would be advisable not to trade in a leveraged market such as the futures market; and on the contrary, to go to a market that offers a less leveraged type of trading such as CFDs.
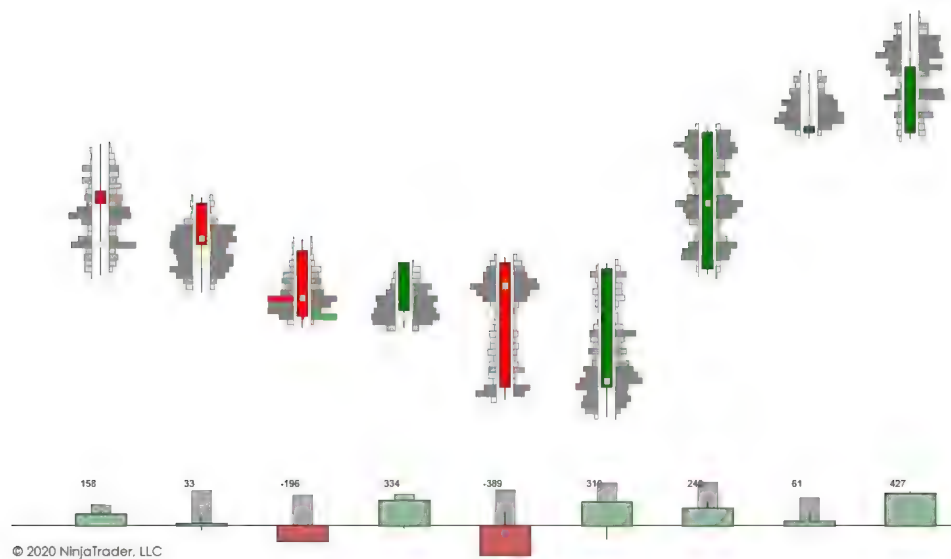
Going further into this concept of working with different brokers and markets, it is important to remember that you do not necessarily have to pigeonhole yourself into any particular type of trading. You may want to carry out shorter-term speculative trading of the asset in question on the futures market; and this is not incompatible with proposing scenarios that cover a longer time horizon and carry out such medium-term trades using the CFDs already mentioned; and also to be able to carry out longer-term trading with spot shares or exchange-traded funds (ETFs), for example.

This is one of the benefits of the methodology, its universality. Its reading, being based on the true engine of the market, the continuous interaction between buyers and sellers, is equally valid regardless of the asset and seasonality; with the only basic requirement being that the particular asset has sufficient liquidity.

BIBLIOGRAPHY

Aldridge, I. (2010). *High-Frequency Trading: A Practical Guide to Algorithmic Strategies and Trading Systems.* John Wiley & Sons Ltd.

Alexander Trading, LLC. (2008). *Practical Trading Applications of Market Profile.*

Brooks, A. (2012). *Trading Price Action Trends.* Wiley Trading.

Daniels Trading. (2018). *Types of Futures Trades: Basis, Spread, Hedging.* Obtained from https://www.danielstrading.com/2018/02/06/types-futures-trades-basis-spread- hedgingç

Delgado-Bonal, A. (2019). *Quantifying the randomness of the stock markets.* Obtained from Scientific Reports: https://doi.org/10.1038/s41598-019-49320-9

Diaman Partners Ltd. (2017). *Are financial markets Random or Deterministic?* Obtained from http://blog.diamanpartners.com/are-financial-markets-random-or-deterministic

Edwin Oswaldo Gil Mateus, H. D. (2016). *Mercados financieros, eficiencia y adaptación.*

Obtained from http://dx.doi.org/10.19052/ed.3735

Hawkins, P. S. (2003). *Steidlmayer on Markets: Trading with Market Profile.* John Wiley & Sons.

Healthy Markets Association. (2015). *The dark side of the pools: What investors should learn from regulators´actions.*

James F. Dalton, E. T. (1993). *Mind over markets.*

Jones, D. L. (1993). *Value-Based Power Trading – Using the overlay demand curve to pintpoint trends & predict market turns.* Probus Publishing Company.

Jones, D. L. (2002). *Auction Market Theory.* Cisco Futures.

Keppler, J. (2011). *Profit With the Market Profile: Identifying Market Value in Real Time.*

Marketplace Books Inc.

Koy, P. S. (1986). *Market & Markets Logics.* The Porcupine Press. Lewis, M. (2018). *Flash Boys.* Norton & Company.

Lloret, V. M. (2016). *La guía the Tradingway.*

Lo, A. W. (2017). *Adaptive Markets: Financial Evolution at the Speed of Thought.* Princeton University Press.

Nasdaq. (2019). *Total markets. A blueprint for a better tomorrow.*

Patterson, S. (2013). *DARK POOLS: The Rise of the Machine Traders and the Rigging of the U.S. Stock Market.* Random House LCC US.

Peter Gomber, B. A. (2011). *High-Frequency Trading.*

Piras, A. F. (2018). *Non-random behavior in financial markets.* Obtained   from https://www.researchgate.net/publication/322820666_Non_Random_Patterns

SEC. (2011). *Pub. No. 141 (3/11) Trading Basics. understanding the Different Ways to Buy and sell stock.*

SIFMA Insights. (2019). *Electronic Trading Market Structure Primer.*

Tapiero, P. d. (2014). *Is there light in dark trading? A GARCH analysis of transactions in dark pools.*

Valtos, M. (2015). *Trading Order Flow - Understanding & Profiting From Market Generated Information As It Occurs.*

Verniman. (2020). *Futures Trading.* Obtenido de https://verniman.blogspot.com/

Warner, J. (2019). *High-frequency trading explained: why has it decreased?* Obtained from https://www.ig.com/en-ch/trading-strategies/high-frequency-trading-explained--why-has-it-decreased--181010

Wedow, M. P. (2017). *Dark pools in European equity.*

Wikipedia. (2021). *Algorithmic trading.* Obtained from https://en.wikipedia.org/wiki/Algorithmic_trading

ACKNOWLEDGEMENTS

I sincerely hope that studying this book has brought you value and will enable you to reach higher levels in your performance as a trader or investor.

The content is dense and full of nuances. It is very complicated to acquire all the knowledge with a simple reading, so I recommend that you return to make a new study as well as personal notes for a better understanding.

I would love to know your opinion about the book so I invite you to leave a rating.

As you know, I am continually doing research and sharing more information, so I invite you to write me at info@tradingwyckoff.com so I can include you in a new list and receive future content updates for free.

See you on the social media!

Twitter

Youtube

Instagram

Web

ABOUT THE AUTHOR

Ruben Villahermosa Chaves has been an independent analyst and trader in the financial markets since 2016.

He has extensive knowledge of technical analysis as well as development of trading strategies based on quantitative analysis.

His passion for the world of investment has led him to devour a large amount of training on this subject which he tries to disseminate from principles of honesty, transparency and responsibility.

BOOKS BY THIS AUTHOR

[The Wyckoff Methodology in Depth](#)
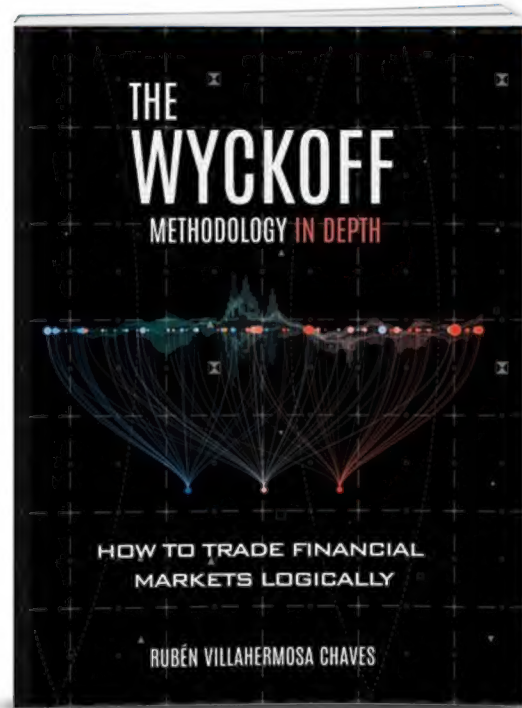
The Wyckoff methodology is a technical analysis approach to trading the financial markets based on the study of the relationship between the forces of supply and demand.

The approach is simple: When large traders want to buy or sell, they carry out processes that leave their traces and that can be observed on the charts through price and volume.

The Wyckoff methodology is based on identifying this intervention of the professional to try to elucidate who has control of the market with the aim of trading with them.

What will you learn?

▶ **How markets move**. The market is formed by movements in waves that develop trends and cycles.

▶ **The 3 fundamental laws**. The only discretionary method that has an underlying logic behind it

1. The law of Supply and Demand.

2. The law of Cause and Effect.

3. The law of Effort and Result.

▶ **The processes of accumulation and distribution**. Development of structures that identify the action of great professionals

▶ **The events and phases of the Wyckoff Methodology**. The key market actions that will allow us to perform judicious analysis

▶ **Trading**. We combine context, structures and trading zones to position ourselves on the side of the great traders.